

Chapter 3

Employment

SECTION I—TASK ORGANIZATION

GENERAL

3-1. This chapter describes the employment of the RAS, DCS, and their associated ACTs in the execution of their primary missions—reconnaissance and security operations. In addition to conducting reconnaissance and security operations, the squadron enhances and conducts special-purpose, JAAT, and air combat operations. It also assists in the passage of lines.

REGIMENTAL AVIATION SQUADRON

3-2. The RAS operates under the control of the ACR and, in special situations, could be placed under OPCON of corps, TF, or division headquarters. It is normally employed at the squadron level but may be assigned missions below squadron for specific operations and periods.

3-3. The squadron commander task-organizes the squadron for employment as required for combat operations. Reorganization may be based on METT-T. The RAS is normally employed with organic assets but may receive and operationally control other combined arms assets.

3-4. An ACT may be placed under OPCON of a ground squadron. This method is most effective when a habitual relationship is established.

DIVISION CAVALRY SQUADRON

3-5. DCSs are organic to armored (heavy), light infantry, air assault (identified as an ACS) and airborne division aviation brigades. The squadron may be placed under OPCON to corps, brigade, or other maneuver headquarters. The aviation brigade commander may also employ it. The squadron is normally employed at the squadron level but may be assigned missions below squadron for a specific mission or time.

3-6. The structure of the squadron varies, depending on the organization to which it is assigned and METT-T. The squadron primarily conducts reconnaissance and security operations.

AIR CAVALRY TROOP

3-7. The ACT consists of two platoons of four OH-58D KWs each. Based on possible employment methods, aircraft crews must maintain proficiency in cavalry and attack roles.

3-8. Based on a 75-percent availability rate for planning, the ACT will have six aircraft operational. Considering the factors of METT-T, the troop commander can organize in several ways. The troop can either be divided into ACTMs of two aircraft or by platoons.

3-9. Teams of two use the wingman concept. The lead aircraft is primarily responsible for the reconnaissance and the wingman for the protection of the aircraft conducting the reconnaissance or security mission. Relief on station is conducted by another team. The following situations favor using teams of two:

- Close terrain that does not allow full standoff capability.
- Threat that is mostly dismounted.
- Widely separated NAIs or other reconnaissance objectives.

3-10. Using platoons allow for a wider frontage to be covered. Aircraft still maintain contact with other platoon members and provide mutually supporting fields of observation. The platoon leader rotates individual aircraft to and from the FARP. The following situations favor the use of platoons:

- Open terrain that makes use of standoff capability.
- Threat that is mostly mechanized or armor.
- Wider frontages with multiple NAIs.
- Greater than 1.5 hour employment periods.

ATTACK HELICOPTER TROOP(ARMORED RAS ONLY)

3-11. In the ATKHT, the commander will command from an aircraft positioned forward where he can effectively control his unit and see the battlefield. Based on a 75-percent availability rate for planning, the ATKHT will have six aircraft operational. Considering the factors of METT-T, the troop commander can organize in several ways. The troop can either be divided into various team mixes (three teams of two or a heavy and/or light team with 4/2 aircraft) or by platoons. The ATKHT normally operates with two platoons for ease of C².

3-12. Before an engagement, the ATKHT commander or his representative conducts final coordination with the air and/or ground commander or S3. Preferably, such coordination should be conducted face to face. The ATKHT performs its mission in the same way as the AH company in an ATKHB, as discussed in FM 1-112.

3-13. ATKHT can be assigned missions to perform reconnaissance tasks. These tasks are performed in the same manner as an ACT.

ASSAULT HELICOPTER TROOP (ARMORED AND LIGHT RAS ONLY)

3-14. The AHT of the RAS provides the squadron commander with a highly mobile, flexible, and responsive force. This unit can conduct a wide variety of CS and CSS missions. The AHT provides the ability to conduct limited air assaults, air movement of critical supplies using external and internal loads, CASEVAC, aerial mine warfare (VOLCANO), DART, and C² operations. The

AHT commander organizes his assets on a mission-by-mission basis. Rarely will the AHT operate as a whole, and often elements of the AHT will be under the DS of a squadron to conduct missions.

3-15. The Armored RAS and divisional GSAB have 4 EH-60 Quickfix helicopters assigned. The 4 EH-60s in the armored RAS are organic to the HHT. During combat these aircraft will normally be under operational control of an MI company and will receive missions directly from that company. The EH-60 Quickfix gives the commander the capability to direction find, monitor selected frequencies, and jam.

EMPLOYMENT CONSIDERATIONS

3-16. The ACR, division, or corps commander and squadron commanders have a number of options available to them when employing ACTs. Options of employing troops in attack or R&S mode must be weighed carefully against the METT-T requirements. Some possible options followed by advantages and disadvantages are noted below (these listed options are not all inclusive)(see Table 1-1, below).

Table 3-1. Employment Advantages and Disadvantages

	R&S	Attack	Combination of Attack and R&S
Advantages	24-hour operations. Best benefit gained from acquisition systems. Supports ground commander R&S tasks. Provides greatest reaction and maneuver space. High concentration of air cavalry throughout sector. Optimal Class III and/or Class V support.	24-hour operations. Dedicated counterattack force. Maximum offensive operations.	Provides HHQ with multi-level attack and R&S capability. Provides same advantages as attack and R&S with reduced aircraft availability on 24-hour basis, 1 day and/or 1 night.
Disadvantages	Limited counterattack capability.	No dedicated R&S which is their primary mission. No ground commander support of R&S tasks. Limited early warning and reaction time provided by aviation. Increased III and/or V usage based on attack missions. OH-58D has limited firepower and crew protection compared to AHs.	Limited 24-hour operations. Smaller sector of attack and R&S coverage.
NOTE: Sustained 24-hour operations greater than 72 hours is impacted by maintenance and fighter management.			

SECTION II—RECONNAISSANCE OPERATIONS

PURPOSE

3-17. The primary missions of air cavalry are to conduct reconnaissance and security. Reconnaissance is a mission undertaken to obtain information about the activities and resources of an enemy or about the meteorological, hydrographic, or geographic characteristics of a particular area. Reconnaissance is a focused collection effort that produces combat information. Reconnaissance is performed before, during, and after other combat operations to provide information used by the squadron or ground force commanders to confirm or modify the plan.

3-18. ACTs gather and report the information on which the squadron commander or ground force commander bases plans, decisions, and orders. Reconnaissance missions are divided into four categories—route, zone, area, and reconnaissance-in-force. ACTs may be assigned any combination of the four categories of reconnaissance. In most mission profiles, integration of ground and air cavalry provides mutual reinforcement. For example, ground cavalry may reinforce air cavalry if the terrain offers concealment from aerial observation. The distance the ACT operates from the supported unit (i.e., ground cavalry unit, main body, or both) is a function of METT-T but generally is forward enough to provide the ground commander time to maneuver before enemy direct fires can be brought into effect.

3-19. A primary consideration is the ability of ACTs to maintain communication with their ground counterparts and squadron headquarters. The flow of information between ACTs and ground troops increases the efficiency of the reconnaissance and survivability of each asset. When ACTs operate with or without ground troops, they maintain communications with the squadron's TOC (digital and voice), or the controlling maneuver commander's TOC.

3-20. Reconnaissance missions focus on reconnaissance objectives and set strict criteria for engagement and developing the situation in conjunction with ground forces and supporting fires. Supporting fires include indirect fire (troop mortars, DS and GS artillery) and TACAIR. Nonlethal SEAD and EW assets should also be considered and employed whenever available. These assets support the ACT during reconnaissance operations. Their availability is essential to the success of ACTs.

FUNDAMENTALS

3-21. The air cavalry conducts reconnaissance according to six fundamentals. These fundamentals are as follows:

- Orient on the location or movement of the reconnaissance objective. The objective may be a terrain feature, a locality, or an enemy force. Air cavalry must orient on the objective and position itself to retain freedom of maneuver.
- Report all information rapidly and accurately. Information that initially appears unimportant may become valuable when used with other information. Knowing that an enemy force is not in one location

can be just as important as knowing it is in another. Reconnaissance reports must be relayed in a timely manner for the information to be useful to the commander.

- Retain freedom to maneuver. Air cavalry must move to survive. It obtains information by stealth, when possible, but fights as necessary to accomplish the mission. Overwatch, suppressive fire, cunning, and constant awareness of the tactical situation to the flanks help retain freedom to maneuver. The air cavalry commander maneuvers his elements to avoid decisive engagement. Once engaged, the air cavalry will lose some of its capability to continue the reconnaissance. Therefore, air cavalry engagements during reconnaissance operations consist only of those actions required to prevent decisive engagements and to continue the reconnaissance mission.
- Gain and maintain enemy contact. Contact reduces the enemy's ability to achieve surprise. Once contact is made, it is not voluntarily broken; orders must be received to break contact. The air cavalry may be the first friendly element that establishes contact with the enemy. Once the air cavalry establishes contact, it reports the information immediately. The air cavalry commander should be continually updated on the tactical situation. The air cavalry may maintain visual contact from a great distance, or it may engage with organic and/or attached AH fire. The degree of contact desired is determined before the mission begins.
- Ensure maximum reconnaissance forces forward. The maximum number of intelligence-gathering assets and their capabilities are involved in the reconnaissance effort. Air cavalry is most valuable when it is providing essential battlefield information. To do this, it must be positioned as far forward as METT-T factors allow. It operates at a distance supported by CS and CSS assets.
- Develop the situation rapidly. When the enemy situation is vague or unknown, the air cavalry deploys to gather information for the supported commander. Immediately on gaining enemy contact, it deploys to cover, maintains observation, and reports and develops the situation. It develops the situation based on the tactical order, unit SOP, or the directions of the commander.

PLANNING CONSIDERATIONS

3-22. The air mission commander verifies the location of the FARP, active times, and Class III and/or Class V availability during mission planning. The squadron S4 and III and/or V platoon leader are responsible for all FARP operations in support of the ACT's mission. Refueling and rearming times and the requirement to maintain continuous operations dictate the FARP's location. The air mission commander must maintain close coordination with the squadron and possibly other aviation brigade elements in the area, to ensure that the location of the FARP supports the reconnaissance mission. When possible, FARP operations should be part of the mission rehearsal.

3-23. ASE and/or EW considerations must be part of the mission planning process to minimize risks while accomplishing the mission. Detailed instructions are contained in Appendix H.

CAPABILITIES

3-24. Air cavalry's ability to conduct reconnaissance is a function of the enemy situation (especially enemy ADA and direct fire systems), terrain in the AO, weather conditions, and the logistics support availability.

3-25. An ACT can reconnoiter two routes simultaneously. It can conduct a zone reconnaissance on 8-10 kilometer-wide zone (terrain dependent). An ACT can conduct a zone reconnaissance at a rate of 10 kilometers per hour (terrain dependent).

METHODS OF RECONNAISSANCE

3-26. The three methods of reconnaissance at the ACT level are aerial, reconnaissance by fire, and dismounted. The air mission commander and/or team leader may use any method or combination of methods to accomplish the reconnaissance mission under the considerations of METT-T, and the higher commander's intent and guidance. Aerial reconnaissance may also include conducting coordinated reconnaissance forward of a GCT. When conducting reconnaissance forward of ground troops, coordination must take place to prevent fratricide.

AERIAL RECONNAISSANCE

3-27. The ACT uses this technique in most of its reconnaissance efforts. It is characterized by—

- The need for rapid reconnaissance.
- The use of aircraft TIS and/or TVS systems to acquire targets and/or reconnaissance objectives at the maximum standoff distance.
- Use of onboard video imagery to acquire the combat information.
- Low probability of enemy ADA threat.
- The need to clear the area forward of the ground cavalry to accelerate the reconnaissance tempo.
- The requirement to maintain reconnaissance over extended distances. (Circumstances and/or terrain may preclude the use of ground cavalry to execute missions, forcing the air cavalry to maintain a presence in an AO.)

RECONNAISSANCE BY FIRE

3-28. When conducting reconnaissance by fire the troop and/or team places direct and/or indirect fire on positions the enemy is suspected of occupying. If using the OH-58D with ordnance for direct fire, more FARP rotations are required. The intent of the action is to cause the enemy to disclose his presence by moving or returning fire. The commander may use reconnaissance by fire when—

- Situation meets strict engagement criteria.

- Time is critical.
- Encountering obstacles that could be overwatched by an enemy.
- An enemy position is suspected.
- Enemy locations are known.

3-29. The technique has advantages and disadvantages. It is more advantageous with a poorly disciplined enemy that will likely react when engaged. The disadvantages of reconnaissance by fire are the obvious loss of surprise, exposing the location of the firing element, and the possibility of becoming decisively engaged. Requires more frequent FARP rotations.

3-30. Once the decision is made to employ this technique, the weapons should be used in the following priority: indirect fire, machine gun and/or rockets, (Hellfire) missiles. The limited organic firepower in an ACT emphasizes the use of indirect fire as the primary means of engagement.

DISMOUNTED RECONNAISSANCE

3-31. The ACT commander may direct aircrews to conduct dismounted reconnaissance in extreme circumstances when information is required on a specific reconnaissance objective. This technique is time intensive, can place the aircraft in a vulnerable position, and does not make the best use of aircraft systems.

AIR CAVALRY RECONNAISSANCE TECHNIQUES

3-32. The ACT uses four basic techniques to conduct a reconnaissance mission. These techniques are—

- Observation. Observation is continuous and is performed by all aircrews. Aircrews constantly apply the three basic visual search techniques—stationary, motive, and sidescan. Crews integrate the MMS into their observation technique for its TVS and/or TIS and its ability to cover the dead space to the aircraft's rear. Aerial observation techniques are used to detect, identify, locate, and report combat information as described in TC 1-209 (ATM). Aircrews use terrain flight techniques and airspeeds to evade detection and accomplish the mission.
- Maneuver. Aircrews use low-level, contour, and NOE terrain flight modes based on the probability of enemy contact and available terrain. Troop movements are conducted using traveling, traveling overwatch, and bounding overwatch movement techniques.
 - Traveling. The traveling technique is used for moving aircraft in formation rapidly on the battlefield when enemy contact is unlikely, or when speed is required to evade the enemy. It requires all aircraft flying in formation to move at the same relative speed.
 - Traveling overwatch. The traveling overwatch technique is normally used when aircraft are conducting a reconnaissance when speed is essential and enemy contact is possible. It requires the lead aircraft to move constantly and a trail aircraft to move as necessary to maintain an overwatch position.

- Bounding overwatch. The bounding overwatch technique is also normally used when conducting reconnaissance and enemy contact is expected. It is the slowest movement technique and requires the overwatching and bounding aircraft to occupy successive positions that offer observation and fields of fire. Each aircraft bounds separately while the other aircraft overwatches the movement. Length of the bound depends on the terrain, visibility, and the effective range of the overwatching weapon system.
- Overwatch. Overwatch includes both observation and suppression. The overwatching aircraft, in its concealed position, continues to observe the area as well as the moving or bounding aircraft. Primarily, the overwatching aircraft enhances the survivability of the bounding aircraft by alerting the team member of an enemy sighting or suspicious activity. If the enemy is contacted, the overwatching aircraft assists by providing suppressive fire if needed.
- Reporting. Reports of direct visual observation are the most important and timely combat information available. Therefore, reports must be accurate, concise, and timely. Reports of no enemy sightings are as equally important as actual enemy sightings.

3-33. When tasked to conduct reconnaissance operations the ACT can split its area into team zones depending on METT-T. Use of waypoints on the HSD to visually define the reconnaissance zone simplifies the reconnaissance effort. Use of the MMS to prepoint NAIs at maximum standoff and overwatch team and/or troop members adds depth to the zone.

3-34. When an ACT conducts a zone reconnaissance to a screen in nonrestrictive terrain, the troop can operate up to 10 kilometers forward of ground troops due to the quality of communications, target acquisition capability MMS, and onboard armament of its aircraft. Close coordination and continuous communication between forces is critical to preventing the possibility of fratricide.

3-35. Because of its ability to conduct long range observation, the ACT is placed forward, and if possible, to the flanks of ground elements, adding depth to the commander's zone. To increase operational tempo, the ACT focuses its reconnaissance effort on areas that impede ground cavalry movement (battalion avenues of approach or likely enemy reconnaissance and/or infiltration routes).

ACTIONS ON CONTACT

3-36. Actions on enemy contact are a series of steps the troop takes when it encounters an enemy force or situation that warrants or demands action. Actions on contact are important because they allow the troop to maintain its tempo of operation by rapidly developing the situation and taking action before the enemy can gain the initiative and force the troop to react. At troop, platoon, or team level, actions on enemy contact consist of the following four steps:

- Deploy to cover and report.

- Maintain contact and develop the situation.
- Choose a COA.
- Recommend or execute a COA.

3-37. While the team that makes contact executes actions on contact, the AMC must continue to maneuver the remainder of the troop to ensure a clear picture of the enemy situation across the entire troop front. The following steps demonstrate the actions taken by the team in contact and the corresponding actions at the troop level:

Deploy to Cover and Report

3-38. **Team Action.** The team that makes initial contact with the enemy immediately deploys to terrain that affords them both cover and good observation. If necessary, the team returns fire to suppress the enemy, and then deploys to a covered position and reports (digital).

3-39. **Troop Action.** All other team leaders monitor the contact report. The AMC assesses the information and maneuvers to a position to monitor the action. However, the troop must not lose focus on the reconnaissance mission.

Maintain Contact and Develop the Situation

3-40. **Team Action.** The team in contact further identifies the threat. The team maneuvers to determine the enemy's size, composition, and orientation, and the exact location of weapon systems. The team may also use reconnaissance by fire to determine the enemy's tactical intentions. The reconnaissance-by-fire technique should, however, be conducted with indirect-fire assets when possible to avoid revealing the aircrew's position. The ACT and/or AMC needs to establish indirect and/or direct fire control measures to control fires. To determine if the enemy can be supported by any other forces, the team should search for enemy flanks and all adjacent terrain. They identify good counterattack routes into the flanks or rear of the enemy. Once the team leader determines the extent of the situation, he forwards a follow-up spot report (digital).

3-41. **Troop Action.** The AMC will most likely tell the team not in contact to continue its reconnaissance to a designated LOA to develop the situation across the entire troop front. By doing this, the troop can determine if there are any other enemy forces in the area that will affect the situation. The team not in contact will establish hasty OPs along the LOA oriented on likely enemy locations or avenues of approach.

Choose a Course of Action

3-42. **Team Action.** Once the enemy situation has been developed, the team leader selects the best COA within the commander's intent, concept of the operation and the team's capabilities. Resuming the mission as soon as possible is normally the main criteria for COA selection. The possible COA may be—

- Hasty attack. The team leader can conduct a hasty attack if the target meets the engagement criteria for the mission and the team possesses sufficient combat power to defeat the enemy quickly. In most cases the

team does not have the capability to defeat an enemy in prepared positions and is normally under specific instructions not to become decisively engaged.

- Bypass. If the team chooses to remain undetected and continue the reconnaissance mission, the team may maneuver to bypass the enemy. The team leader must receive the AMC's permission (either verbally or as stated in the OPORD) to bypass any elements. Unless directed otherwise, the team leader should leave an aircrew in contact with the enemy until conducting a BHO.
- Hasty screen. If the team cannot conduct a hasty attack and cannot bypass, it establishes a hasty screen and maintains contact through observation. The team concentrates on maintaining contact with the enemy and fixing it in place with indirect or possibly direct fire until additional support comes from the troop or other unit.
- Support by another team. The team in contact may support a BHO for a hasty attack by another team or an ATKHT, if available.

3-43. Troop Action. The AMC must approve or disapprove the recommended COA, based on its effect on the troop and squadron mission. The overriding considerations in selecting a COA are the intent of the squadron commander and the troop's ability to complete the mission with minimum losses. The decision to conduct a hasty attack requires the AMC and/or team leader to conduct hasty attack planning. This planning should consist of the following:

- Select an ABF or SBF position.
- Define the EA.
- Define the target.
- Determine the method of engagement.
- Establish criteria for success.
- Establish a trigger point.
- Divide the EA for troop and/or team level fire coordination and establishing control measures for direct and/or indirect fire planning.
- Coordinate for CAS, JAAT, and artillery.
- Plan the BHO.
- Coordinate the change to CSS requirements, i.e., adjust weapons loads, adjust relief-on-station rotation.
- Deconflict direct and indirect fires with ground troops.

ROUTE RECONNAISSANCE

3-44. A route reconnaissance is conducted to obtain information about a specific route and all adjacent terrain from which the enemy could influence movement along the route. The reconnaissance may be oriented on a road, an axis, an air route, or a general direction of advance or attack. The squadron normally does not conduct a route reconnaissance. The route reconnaissance is usually conducted as part of a zone reconnaissance. The

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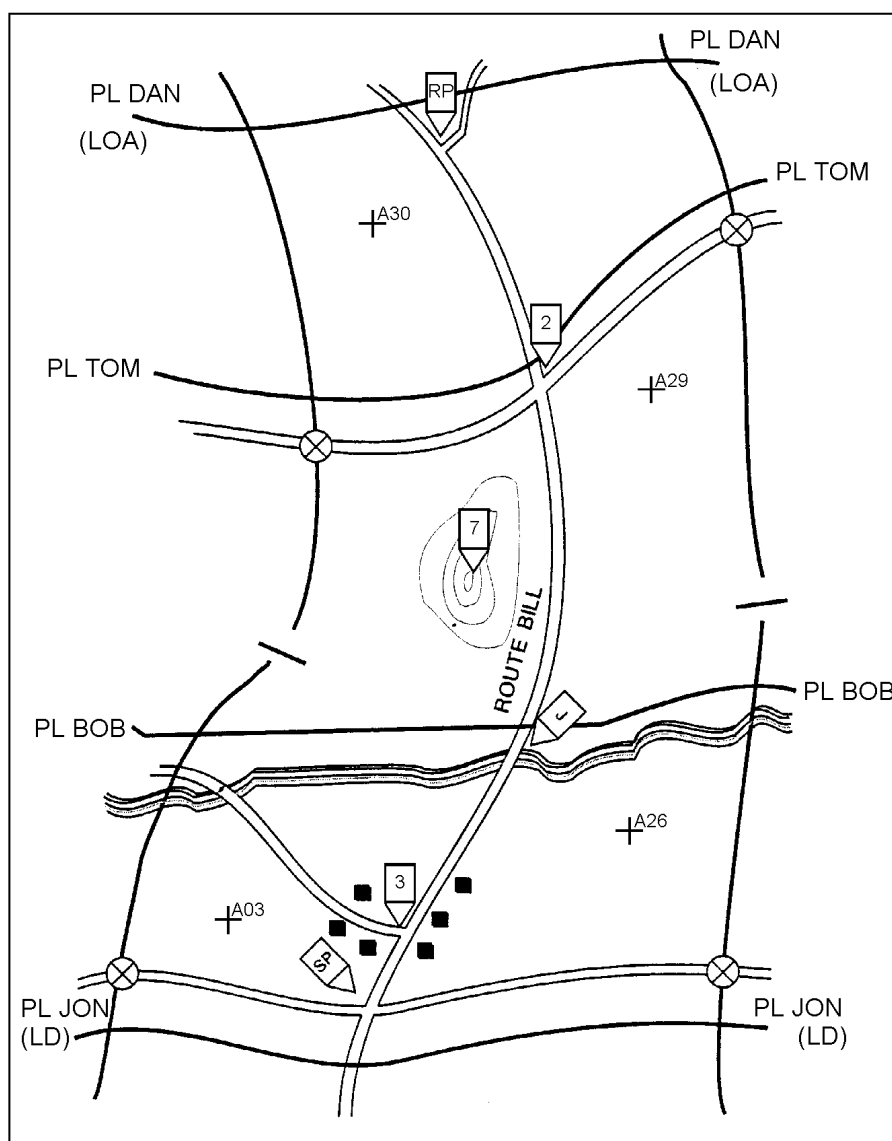


Figure 3-1. Troop Graphics for a Route Reconnaissance

3-45. The following critical tasks are for a route reconnaissance:

- Reconnoiter all terrain the enemy can use to dominate movement along the route.
- Reconnoiter all terrain within the zone, assist scout platoon(s) with built-up areas.
- Locate sites for constructing hasty obstacles to impede enemy movement.
- Reconnoiter all defiles along the route for possible ambush sites and locate a bypass.
- Locate a bypass around built-up areas, obstacles, and contaminated areas.
- Find and report all enemy that can influence movement along the route.
- Report route information.

3-46. Before conducting a route reconnaissance, the air cavalry element must know certain information about the route. This information includes—

- Critical tasks to be accomplished by ACTM and scout platoon, when used. Any tasks that may be deleted during the reconnaissance are identified.
- Task organization. Any reinforcements, especially engineers, and their relationship to the troop are identified. Supporting artillery relationships are also defined.
- SP, RP, and designation of the route.
- Mission to be performed to the SP and after reaching the RP.
- Time the mission is to start and, if required, to be completed.
- Critical points along the route identified as checkpoints.
- IPB information on the route and enemy situation.
- Any constraints or restrictions.
- Expected weather conditions for the time of movement.
- Type of unit or vehicles expected to use the route, if applicable.
- Time of day or night the route is expected to be used, if applicable.

3-47. When time is not available, scout platoon assets are not available, or the mission does not require detailed information, cavalry assets may have to conduct a hasty route reconnaissance. In this case, information gathering is limited to the type of route (X--unlimited or all weather, Y--limited or fair weather, or Z--poor weather) and obstacle limitations (maximum weight, height, and width). The commander may also identify certain additional information that must be gathered.

3-48. ACTM(s) and scout platoon(s) should keep records on all routes reconnoitered. Several methods are acceptable for recording this information. One method is to assign each key terrain feature (bridge,

fording site, bypass site) a number on the map and detail the intelligence information on a separate work sheet. This method ensures completeness and simplicity and reduces map clutter.

3-49. The use of the AVTR or Video Xlink to record areas of interest along the route provides superior combat information to the requesting headquarters. If the AVTR is used, planning must be conducted to return the 8mm tape to the requesting headquarters and crews must use a standardized video reconnaissance technique to clearly associate terrain with the targets portrayed on the video image. If phototelesis (the sending of real time or still frames of video) is used, the squadron AMPS operator may print the video image and transmit the image by fax or courier to the using headquarters.

3-50. The principles of an air route reconnaissance are the same as for a route reconnaissance except that the areas of interest are different. Aviation forces moving along an air route are primarily concerned with the location of enemy forces, ease of navigation, suitability of landing sites and zones, and hazards to flight. Hazards to flight include suspected enemy AD locations, mountainous areas, wires, large bodies of water, open terrain, and other natural and man-made features.

ZONE RECONNAISSANCE

3-51. A zone reconnaissance is a directed effort to obtain information concerning all routes, obstacles (to include chemical or radiological contamination), terrain, and enemy forces within a zone defined by boundaries. The boundaries of a zone are restrictive, unlike those of an area reconnaissance, which are permissive. ACTMs require permission from the ground commander to extend their reconnaissance outside of the zone's boundaries. It is the most time-consuming of the reconnaissance missions. The purpose may be to find the enemy or suitable avenues of approach for the main body. A zone reconnaissance is normally conducted when information on cross-country trafficability is desired or when the enemy situation is in doubt. Every route within the zone must be reconnoitered unless otherwise directed. The zone to be reconnoitered is defined by lateral boundaries, a LD, and an objective or LOA.

3-52. Certain tasks must be accomplished during a zone reconnaissance unless specifically directed otherwise by the commander. Based on time and the commander's intent, the cavalry commander may direct the reconnaissance towards specific information only. The following critical tasks are for a zone reconnaissance:

- Find and report all enemy forces within the zone.
- Reconnoiter specific terrain within the zone and assist scout platoon(s) with built-up areas.
- Report reconnaissance information.
- Reconnoiter all terrain within the zone and assist scout platoon(s) with built-up areas.*

* The commander, time permitting, may also direct the ACTM to accomplish this critical task.

- Find suitable covered and concealed air avenues of approach.*
- Determine significant adverse weather.*
- Locate a bypass around built-up areas, obstacles, and contaminated areas.*
- Inspect and classify all bridges, overpasses, underpasses, and culverts within the zone.*
- Locate fords and crossing sites near all bridges in the zone.*
- Locate all mines, obstacles, and barriers in the zone within its capability and assist ground cavalry units in their clearance.*

3-53. The squadron, depending on time and the commander's intent, normally conducts a zone reconnaissance by employing ACTMs in concert with scout platoons. The ACTMs can perform the zone reconnaissance with or without support from scout platoons. The ATKHTs or OPCON AH company, if available, can be held in reserve or if time is critical they can support the zone reconnaissance effort using their onboard sensors (TIS, FLIR, FCR, and video recorder). The commander assigns boundaries between elements to specify zones of responsibility. Sectors should be near easily recognizable terrain features such as roads, streams, and prominent structures. After establishing zones, the unit designates an LD and specifies a crossing time. PLs, contact points, coordination points, and checkpoints ease essential coordination between adjacent elements. PLs are established as needed to control and coordinate forward movement. Failure to keep reconnaissance elements abreast may result in the bypass of enemy elements, envelopment by enemy forces, or engagement of friendly forces. Like boundaries, PLs should generally follow features that are easy to recognize, particularly for night operations or periods of limited visibility (smoke, haze, fog). Contact points are designated on boundaries to ensure physical coordination between adjacent elements. Contact points are designated at—

- Points that ensure proper coverage of the zone.
- Critical points (such as, a route crossing from one troop sector into another).
- Points that ease movement, lateral coordination of fires or positions, passage of lines, or logistics support.

3-54. Troops report crossing PLs but do not stop unless ordered to do so. Once the operation begins, the enemy may be alerted. Forward momentum should be maintained to gain and maintain enemy contact and to keep the enemy off balance. The zone is systematically reconnoitered from the LD to the objective or LOA. Figure 3-2 shows the graphics for a RAS zone reconnaissance. Figure 3-3 shows the graphics for a division cavalry troop zone reconnaissance.

* The commander, time permitting, may also direct the ACTM to accomplish this critical task.

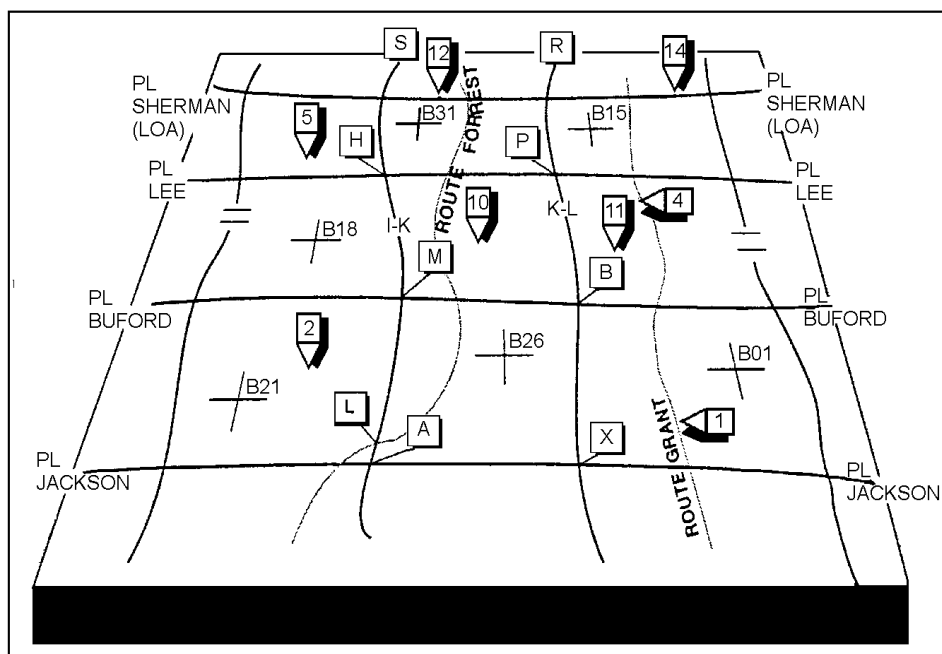


Figure 3-2. Graphics for a RAS Zone Reconnaissance

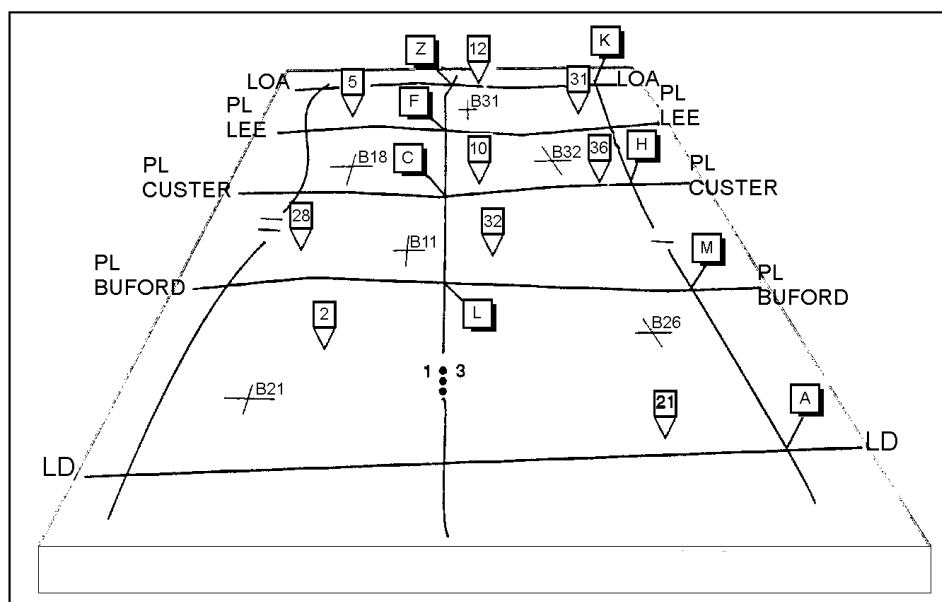


Figure 3-3. Graphics for a Division Cavalry Troop Zone Reconnaissance

3-55. If enemy contact is made, ACTMs maintain contact, report, and develop the situation. Reconnaissance forces may be instructed to bypass, engage and destroy, or maintain contact until an AH or ground maneuver unit arrives to engage. The squadron may direct specific engagements and/or bypass criteria for the ACTs. To ensure continuity of effort, the squadron designates the forward movement of the operation and tells each element what to do after mission completion. If the squadron is not given a follow-on mission, the ACTMs should be assigned objectives on dominant terrain to maintain surveillance and ensure enemy situation in zone remains as reported. In addition to reporting significant activities in the zone, the ACTMs report all appropriate control measures (PLs, checkpoints, contact points).

3-56. Generally, when working with a ground troop, the ACT will perform a well coordinated zone reconnaissance forward of the ground troop and will reconnoiter terrain not assessable to the ground troop. If time is critical, the ACTM may perform the zone reconnaissance alone with the understanding that the combat information obtained will be less detailed.

3-57. The air mission commander uses multiple teams to conduct a zone reconnaissance. Team leaders are assigned the responsibility for planning the reconnaissance within the team sectors. Team leaders select the method of reconnaissance, the mode of terrain flight, and movement technique based on the IPB with specific emphasis on hazards to navigation and enemy ADA. Starting with the LD, the teams reconnoiter each zone in a systematic manner based on terrain, number of aircraft in the team, and the width of the zone

3-58. Zones are divided into troop and/or platoon zones. Boundaries designate areas of responsibility when more than one troop and/or platoon are deployed abreast. PLs assist in controlling movement to ensure that reconnaissance elements remain abreast.

3-59. Before departing on the mission, the team leader selects significant checkpoints for examination and plans a route between the checkpoints, using terrain and vegetation to conceal the aircraft movements. The team leader also coordinates to ensure any specific tasks for support of the ground force commander are integrated into the reconnaissance plan. Specific tasks that may be assigned to an ACT while working with ground forces may include—

- Reconnoitering terrain not easily accessible to ground vehicles.
- Rapidly checking key points in zone.
- Locating and reporting the flanks of enemy forces encountered by air or ground scouts.

- Locating, reporting, and bypassing obstacles and enemy positions.
- Providing security on the far side of obstacles while ground forces reconnoiter and clear them.

AREA RECONNAISSANCE

3-60. The purpose of an area reconnaissance is to gather intelligence or to conduct surveillance of a specified area. The target may be key terrain, a farm, a bridge, a ridgeline, a wooded area, a proposed AA, an LZ, or other features that will be critical to an operation. The specified area to be reconnoitered is designated by boundary lines enclosing the area. METT-T will determine the movement technique the reconnaissance element will use to reach the area and the method by which the area will be systematically reconnoitered. The ACTM also reconnoiters dominant terrain outside the specified area from which the enemy can influence friendly operations.

3-61. During a area reconnaissance, the following critical tasks apply, unless directed otherwise:

- Reconnoiter specific terrain within the area and dominant terrain outside the specific area from which the enemy can influence friendly operations.
- Report reconnaissance information.
- Find and report all enemy within the area.
- Reconnoiter all terrain within the area and assist scout platoon(s) with built-up areas.*
- Determine significant adverse weather.*
- Locate a bypass around built-up areas, obstacles, and contaminated areas.*
- Inspect and classify all bridges, overpasses, underpasses, and culverts within the area.*
- Locate fords and crossing sites near all bridges in the area.*
- Locate all mines, obstacles, and barriers in the area within its capability and assist ground cavalry units in their clearance.*

3-62. The squadron commander first considers the factors of METT-T. Rapid movement to the objective is important, but the main consideration usually is security. Avoidance of known enemy locations and enemy surveillance elements is imperative. Primary and alternate routes to the objective area are therefore selected based on security and speed. Terrain flight techniques are used to move to the area. The commander treats the assigned area like a zone reconnaissance. The area is enclosed in a boundary. Upon completion of the reconnaissance, the squadron departs the area on a different route.

3-63. The primary difference between a zone and an area reconnaissance is the nature (restrictive versus permissive) of the boundaries. A zone reconnaissance has restrictive boundaries that define the ACTM mission area. Because of this, a zone reconnaissance does not have an implied task to reconnoiter dominating terrain that is outside of the zone. The boundaries of

* The commander, time permitting, may also direct the ACTM to accomplish this critical task.

an area reconnaissance are permissive and allow the ACTM greater freedom in selecting their ingress and egress routes. The squadron may move to and reconnoiter one large area or several small, air cavalry dispersed areas. It may also assign this mission to one or more ACTs. An area reconnaissance may be performed behind friendly lines or deep behind enemy lines. Emphasis is normally placed on reaching the objective area quickly. The squadron usually moves over several routes to reduce mission execution times.

3-64. The squadron commander may divide the area into troop zones with designated objectives for each respective unit. The flanks of the overall objective area are secured first, reconnaissance efforts may then be focused inward. ACTMs may establish a screen on the flank to provide security for the ground reconnaissance forces. ACTMs may have to dismount and physically reconnoiter a specific area. Figure 3-4 shows the graphics for an area reconnaissance.

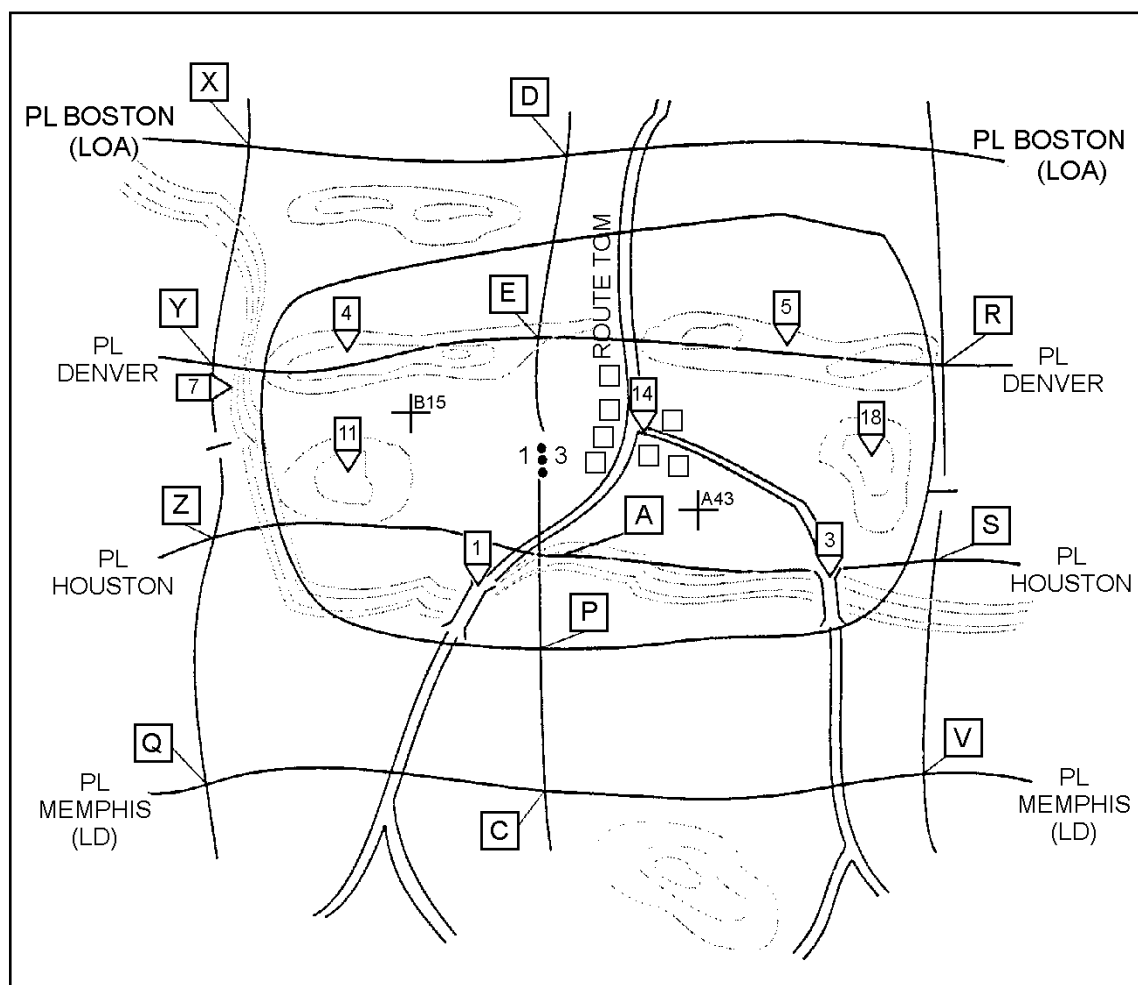


Figure 3-4. Graphics for an Area Reconnaissance

3-65. Long range observation should be used whenever possible to reduce the enemy's ability to determine the reconnaissance objective. If a flyover is required in a hostile environment, crews must be able to collect the desired information rapidly while flying over an area only once, if possible, but never from the same direction twice.

RECONNAISSANCE IN FORCE

3-66. A reconnaissance in force is a limited objective operation. It is conducted by a larger than squadron force to obtain information and to locate and test the enemy's disposition, strength, and reaction. As the name implies, a reconnaissance in force is an action to develop battlefield intelligence and to reduce uncertainties about the enemy. Initially, as part of the force, the squadron conducts a zone reconnaissance to update the force commander. The squadron may also screen the movement of the force. If enemy contact is made, squadron assets continue reconnaissance to find weaknesses or to develop the situation. The augmenting forces must have the firepower, mobility, and agility required for this role.

3-67. Reconnaissance in force mission is assigned when limited information about the enemy is available. It is also assigned when the commander desires more specific information on the enemy, and when this information cannot be gathered by any other means.

3-68. The C² function for a reconnaissance in force is similar to that for any other operation. However, a reconnaissance in force is characterized by violent, high-tempo actions that are integrated and coordinated throughout the entire effort. Engineer assets in a mobility role may augment squadron elements. Armor, infantry, and cavalry units make up the main force, and FA assets provide flexible DS to the force. AD assets may also augment squadron forces to enhance the overall AD effort of the force. When enemy contact is established, squadron elements direct and secure movement of the main force. They call for and adjust fires and assist engineer and AD forces in support of the main force.

LANDING ZONE AND/OR PICKUP ZONE RECONNAISSANCE

3-69. An LZ and/or PZ reconnaissance is an area reconnaissance performed to determine the suitability for air assault operations of a designated area. Principal concerns are determining if enemy forces are present and in a position to bring direct fires onto the LZ and/or PZ, while evaluating the physical characteristics of the area. This reconnaissance is often performed as a subtask during air assault security missions. An LZ and/or PZ reconnaissance looks for predetermined, specific intelligence requirements. The commander assigned this mission should receive, as a minimum, information on the ground force's objective and other actions after landing, time of the air assault, and the number and type of aircraft in each lift. ACTMs evaluating the LZ and/or PZ should create a sketch of the area with pertinent information included (Figure 3-5). While conducting the reconnaissance, ACTMs evaluate and make recommendations of the following tactical considerations:

- Mission. CTMs evaluate whether the LZ and/or PZ will facilitate the unit's ability to accomplish the mission from or at that location.
- Location. Will the LZ and/or PZ meet the commander's intent for distance from the objective?
- Security. Recommendations are made on the force that will be required to provide security during the air assault.

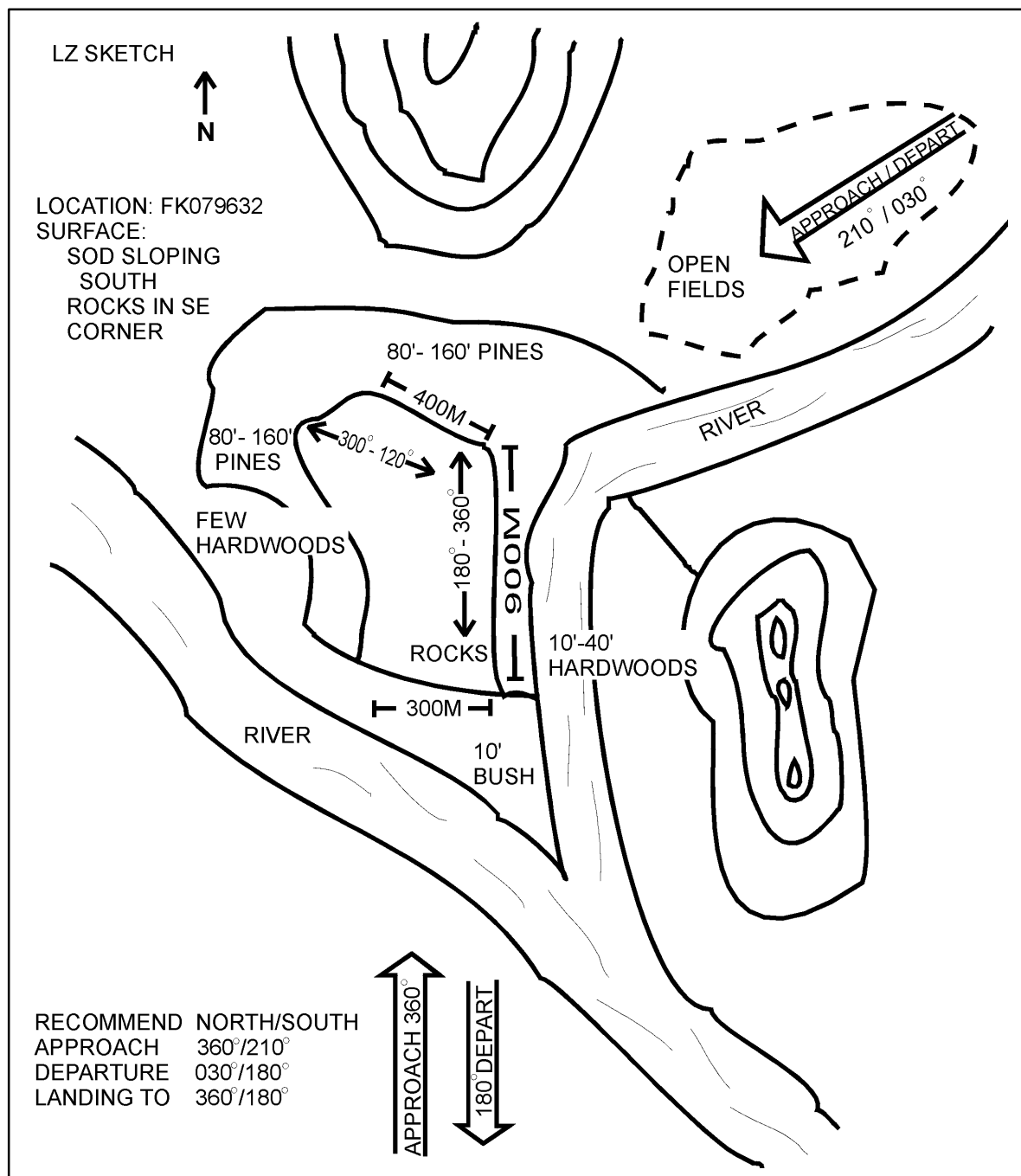


Figure 3-5. Landing Zone and/or Pickup Zone Sketch

- Technical characteristics of the LZ and/or PZ. These characteristics include—
 - Size of the available landing area.
 - Obstacles and hazards in the landing area and vicinity.
 - Ground slope of the landing area.
 - Surface condition of the landing area.
- Specific Requirements. If the ACTM can determine specific requirements, recommendations are made on the following additional technical requirements:
 - Approach and departure directions.
 - Landing formations.
 - Suitability for heavily loaded aircraft.
 - Number and type of aircraft that LZ and/or PZ can support.
- Meteorological conditions. If meteorological conditions observed during the reconnaissance are expected to be present during the air assault, then ACTMs assess the impact of the following meteorological factors:
 - Ceiling and visibility.
 - Density altitude.
 - Winds.

NUCLEAR, CHEMICAL, AND BIOLOGICAL RECONNAISSANCE

3-70. ACTs may be required to conduct NBC reconnaissance tasks. Ground forces should be the primary assets to conduct NBC reconnaissance missions. Tasks may include chemical agent detection, radiological monitoring, and survey operations. NBC reconnaissance may be an implied task during all reconnaissance operations. The purpose of an NBC reconnaissance is to locate the boundaries of contamination or routes around or through a contaminated area or both. This information is used to plan future operations and is vital to the success of friendly operations. Normally, an entire troop does not conduct an NBC reconnaissance, ACTMs are assigned this mission. NBC reconnaissance operations are resource intensive and require extensive planning, to include the decontamination of aircrews and aircraft. Commanders must be aware of the capabilities and limitations of aircraft in conducting NBC reconnaissance. An assessment must be made to determine if aviation assets must be used for NBC reconnaissance.

CHEMICAL AGENT DETECTION

3-71. Chemical agent detection will probably be the most frequent NBC reconnaissance task required of air cavalry elements. Before moving into or occupying an area, unit commanders are concerned with enemy activity and the presence of chemical hazards. The squadron is specifically tailored to accomplish both tasks simultaneously. When determining the presence or absence of chemical agents, the squadron gathers information to answer the following questions:

- Is a chemical agent present?

- If an agent is present, what type is it?
- Where was the agent first detected?
- What are the boundaries of the contaminated area?
- Is a clean route available through the area?

3-72. Before conducting an NBC reconnaissance, the troop commander ensures that the equipment is available and properly prepared. Equipment normally used by the reconnaissance element for chemical and biological reconnaissance includes an automatic alarm, CAM, M256 detector kit, M9 paper, M272 water test kit, and M34 sampling kit. Equipment normally used by the element for radiological reconnaissance include radiacmeter, IM-174 or AN/VDR-2 and dosimeter, IM-93 or pocket radiac, AN/UDR-13. The commander also determines areas of priority. These areas include possible movement routes and unit locations. Finally, the commander designates an area to which the reconnaissance element can return for decontamination.

3-73. During NBC reconnaissance planning, the squadron or troop commander designates areas of responsibility and determines distances between checkpoints. (The distance between each checkpoint depends on the factors of METT-T.) The reconnaissance team initially conducts checks at 500-meter intervals. The team concentrates on areas where chemical agents collect such as low spots, valleys, and sheltered locations. It uses the M256 kit to detect vapors and M9 paper to check liquids. When time is critical, the team uses samplers or detectors only when necessary. Upon detecting a chemical agent, the reconnaissance team marks the area and then moves back to a clean area. It moves laterally a predetermined distance and direction, usually 500 meters, and then moves forward again. The team follows this procedure until it reaches the unit boundary or finds a clean route through the contaminated area.

3-74. The manner in which the information is reported depends on how urgently the information is needed. If time is critical, the information is transmitted by radio using the NBC 4-report format. If time is not critical or if radio assets cannot be used, the information is recorded and carried back to the unit. DA Form 1971-2-R (Chemical Data Sheet - Monitoring or Survey) is used to record and transfer reconnaissance information. FM 3-3 describes reporting procedures in detail. Figure 3-6 shows a completed DA Form 1971-2-R.

RADIOLOGICAL MONITORING

3-75. The ACS is responsible for conducting radiological monitoring in its AO to determine the presence and intensity of residual radiation hazards. The radiation may be from fallout or NIGA areas. The IM174/PD radiacmeter or AN/VDR-2 radiac set is used to monitor radiation. The procedure is outlined in FM 3-3-1. Figure 3-7 shows an example of a completed DA Form 1971-R (Radiological Data Sheet - Monitoring or Point Technique) and Figure 3-8 shows an example of a completed DA Form 1971-1-R (Radiological Data Sheet - Route or Course Leg Technique [Ground and Aerial Survey]).

CHEMICAL DATA SHEET MONITORING OR SURVEY		DATE <i>14 July 86</i>	PAGE NO. <i>1</i>	NO. OF PAGES <i>1</i>
For use of this form see Fm 3-3 proponent of this form is USACMLS				
UNIT <i>B Co 2/31 Inf</i>	MONITOR OR SURVEY TEAM MEMBER (Print Name) <i>SP/4 Moyer</i>			
MONITOR OR SURVEY TEAM NUMBER <i>#82</i>				
MAP USED <i>Karlbadt</i>				
LOCATION/TIME OF TEST OR INDICATION	TYPE DETECTOR USED			AGENT DETECTED
	PAPER	ALARM	KIT	
<i>70521678/1006003</i>		<input checked="" type="checkbox"/>		<i>NERVE</i>
<i>70521678/1006003</i>	<input checked="" type="checkbox"/>			<i>N.</i>
<i>70521678/1006003</i>	<input checked="" type="checkbox"/>			<i>N.</i>
<i>70521678/1006003</i>	<input checked="" type="checkbox"/>			<i>N.</i>
<i>70521678/1006003</i>	<input checked="" type="checkbox"/>			<i>N.</i>
REMARKS				

DA FORM 1971-2-R
JUNE 96

Figure 3-6. An Example of a Completed DA Form 1971-2-R

Radiological Data Sheet-- Route or Course Leg Technique (Ground and Aerial Survey)					Date 20 JULY		Page No. 1		No. of Pages 1			
For use of this form, see FM3-3-1; the proponent agency is TRADOC.												
Survey Party Designation B-2-9				Monitor (Print Name) PFC FARES								
Map Used BIERHOFFEN 1:50,000			Aircraft or Vehicle Type UH-1			Instrument Type AN/VOR-2						
Route or Course Leg Designation			CK-CE		CE-CB		CB-CD					
Time at Start of Leg or Route			0950Z		0950Z		0950Z					
Time Route Completed (for Ground) Or Survey Height (for Aerial)			200FT		200FT		200FT					
Distance or Time Interval Used			10 SEC		10 SEC		10 SEC					
Remarks TIME OF BURST 2007302 N=1.2 CK-CE= AGCF= 3-8 NR = 2.767 OCF = 10.5.5 CE-CB= AGCF= 3.8 NR = 2.884 OCF = 10.959 CB-CD= AGCF= 3.8 NR = 3.123 OCF = 11.867 * Times of start and stop are reported for each route or portion of route completed at one time by ground survey. If a route is done in parts, use a separate column for each part. ** Do Not Use--for control party use only.			Reading No.	Dose Rate (cGyph)	Do Not Use**	Reading No.	Dose Rate (cGyph)	Do Not Use**	Reading No.	Dose Rate (cGyph)	Do Not Use**	
			1	12	126	1	2	22	1	0	0	
			2	12	126	2	2	22	2	0	0	
			3	11	116	3	2	22	3	1	12	
			4	10	105	4	3	33	4	2	24	
			5	9	95	5	3	33	5	3	36	
			6	8	84	6	3	33	6	3	36	
			7	8	74	7	3	33	7	3	36	
			8	6	63	8	4	44	8	3	36	
			9	5	53	9	4	44	9	2	24	
			10	5	53	10	5	55	10	1	12	
			11	5	53	11	5	55	11	1	112	
			12	4	42	12			12	1	12	
Air-Ground or Vehicle Correlation Factor Data			13	4	42	13			13			
			14	4	42	14			14			
Location	Height (Feet) (Air Only)	Dose Rate (cGyph)	CF **	15	3	32	15			15		
				16	3	32	16			16		
				17	2	21	17			17		
				18			18			18		
				19			19			19		
BF	200	5	19	3.8	20			20				

DA Form 1971-1-R, JAN 93

Figure 3-8. An Example of a Completed DA Form 1971-1-R

SURVEY

3-76. Both nuclear and chemical surveys are conducted. Nuclear surveys are conducted to determine the extent and intensity of contamination. Chemical surveys are conducted to determine the size of a contaminated area. Surveys provide information on which future operations are based. Surveys in the covering force area or forward of the FLOT are not normally performed unless the information is critical and the loss of survey assets is acceptable. The squadron and the NBC center (division, corps, area support group, and theater level G3s) coordinate all survey missions. A group composed of a control team and one or more survey teams conducts a survey. The control team is normally formed at squadron level, and survey teams are formed at troop level. The control team controls and directs the survey teams or troops. In radiological surveys, only the minimum number of personnel is exposed to radiation. The control and survey teams may perform aerial and ground radiological surveys. FMs 3-3, 3-3-1, and 3-19 describe in detail nuclear and chemical surveys.

SECTION III—SECURITY OPERATIONS

PURPOSE

3-77. Security operations are conducted to gather information about the enemy and to provide early warning, reaction time, maneuver space, and protection for the main body. Security operations are characterized by reconnaissance to reduce terrain and enemy unknowns, gaining and maintaining contact with the enemy to ensure continuous information flow, and providing early and accurate reporting of information to the protected force. Security missions include screen, guard, cover, and area security missions.

3-78. Security operations are defined by both the degree of protection offered to the main body and the physical characteristics of the operation.

Screen

3-79. The primary purpose of a screen is to provide early warning to the main body. Based on the higher commander's intent and the screen's capabilities, it may also destroy enemy reconnaissance and impede and harass the enemy main body with indirect and/or direct fires. Screen missions are defensive in nature and largely accomplished by establishing a series of OPs and conducting patrols to ensure adequate surveillance of the assigned sector. The screen provides the protected force with the least protection of any security mission.

Guard

3-80. A guard force accomplishes all the tasks of a screening force. Additionally, a guard force prevents enemy ground observation of and direct fire against the main body. A guard force reconnoiters, attacks, defends, and delays as necessary to accomplish its mission. A guard force normally operates within the range of main body indirect-fire weapons. The main body

commander assigns the guard mission when he expects contact or has an exposed flank that requires greater protection than a screen provides.

Cover

3-81. A covering force accomplishes all the tasks of screening and guard forces. Additionally, a covering force operates apart from the main body to develop the situation early and deceives, disorganizes, and destroys enemy forces. Unlike screening or guard forces, a covering force is tactically self-contained and capable of operating independently of the main body.

Area Security

3-82. Area security is a form of security that includes reconnaissance and security of designated personnel, airfields, unit convoys, facilities, main supply routes, lines of communications, equipment, and critical points. An area security force neutralizes or defeats enemy operations in a specified area. It operates in an area delineated by the headquarters assigning the area security mission. It screens, reconnoiters, attacks, defends, and delays as necessary to accomplish its mission. Area security operations focus on the enemy, the force being protected, or a combination of the two.

FUNDAMENTALS

3-83. The squadron conducts security operations according to the five security fundamentals. These fundamentals are briefly discussed below.

ORIENT ON THE MAIN BODY

3-84. A security force operates between the main body and known or suspected enemy units. The air mission commander maneuvers the troop to positions to provide screening support to the main body commander's scheme of maneuver. The screen should be positioned to remain between the main body and the enemy force. This distance should be based upon the relative vulnerability of the main body and the expected enemy rate of advance. As a rule, main body required preparation time multiplied by the expected enemy rate of advance in kilometers per hour equals the minimum distance to emplace security. If this distance cannot be achieved, additional combat power and an extensive obstacle plan may be required.

PERFORM CONTINUOUS RECONNAISSANCE

3-85. A security force performs continuous reconnaissance to gain all possible information about the enemy and the terrain within the assigned AO. (For information concerning the doctrinal frontages and/or distances of ground cavalry units in conjunction with security operations, refer to FM 17-95, FM 17-97, and FM 17-98.) An ACT operating independently will normally operate on an 8- to 10-kilometer front based on METT-T.

PROVIDE EARLY AND ACCURATE WARNING

3-86. Early warning of enemy activity includes accurate reports about the enemy's size, composition, location, movement, and special equipment. This

gives the main body commander the time and information needed to seize the initiative and choose the time and place to engage the enemy.

PROVIDE REACTION TIME AND MANEUVER SPACE

3-87. Air cavalry security force elements operate as far from the main body as possible and according to METT-T. It fights using its organic firepower and screens within range of the main body artillery to maximize its ability to employ long-range indirect fire to gain time and maneuver space for the main body commander to concentrate combat power. During cover operations, the covering force may be out of the main body's artillery range.

MAINTAIN ENEMY CONTACT

3-88. Once gained, contact is maintained to ensure a continuous flow of combat information. Contact is never broken unless specifically directed by the commander.

PLANNING CONSIDERATIONS

3-89. The main body commander should give the security force commander the following critical items of information to facilitate planning:

- Dimensions of the security mission (normally depicted on graphic overlay).
- Minimum reaction time required. This allows the security force commander to determine if the depth of the security zone is sufficient to accomplish the mission and determines how long the security force must delay before falling back to successive PLs.
- Minimum sized enemy force that must be detected. This allows the commander to determine required density of the screen.

3-90. The squadron commander follows general planning principles in preparing for a security mission and determines the troop or troops required to perform the mission. He specifies the area of the security and the time the security must be effectively established with battalion-size avenues of approach into the identified area. The depth of the area should provide enough distance for the main body to react in minimal time. The squadron must not establish its initial security too close to the main body, but within range of the main body artillery. During cover operations, the covering force may be out of the main body's artillery range. The initial screen also follows advantageous terrain for observation of avenues of approach. It is delineated by a PL and is located behind critical control measures such as CFLs and FSCLs. Passage points and routes through stationary units are also coordinated.

3-91. Consideration must be given when assigning air cavalry its own terrain. ASE and/or EW considerations must be part of the mission planning process to minimize risks while accomplishing the mission. Detailed instructions are contained in Appendix H. Limited visibility conditions and weather may affect air cavalry's ability to cover a zone and/or sector. On the other hand, there are times when ground cavalry is limited by mobility, terrain, vegetation, or time, and air cavalry is the only asset capable of conducting the mission.

3-92. The squadron commander, in conjunction with the main body commander, must determine the width and depth of the security and establish a rear boundary between the main body and the security force. The squadron may initially assume responsibility for the area between the main body and the security force. The squadron may conduct a zone reconnaissance from the main body to the initial screen line and then maintain surveillance between the security force and the screen line. The main body may be required to conduct patrols or establish OPs near their positions. Cavalry units MUST carefully plan and coordinate their subsequent rearward movement and passage of lines.

3-93. Unique requirements posed by the mission may require assets not organic to the screening unit. The squadron may need AHs, ground assets, and/or CS assets to effectively perform the mission.

3-94. Fires are planned, and the emplacement of man-made obstacles is coordinated to impede the enemy's advance. The combination of fires and natural and man-made obstacles allows the squadron to impede enemy lead elements, maintain contact, and avoid decisive engagement. The squadron may also continue reconnaissance forward to identify enemy second echelon and follow-on forces. Upon contact, the squadron focuses its effort on the destruction of enemy reconnaissance elements by direct and indirect fires before the enemy can penetrate the initial screen line.

SCREEN

PURPOSE

3-95. The primary purpose of a screen is to provide early warning to the main body through the communication of real-time combat information. This gives the protected force reaction time and maneuver space to orient to meet the threat. The screen provides the protected force with the least protection of any security mission. Air cavalry screens forward, to the flanks, or to the rear of a stationary main body and to the flanks or to the rear of a moving main body. Screening operations are not performed forward of a moving force because that would be an advance guard or zone reconnaissance. Based on the higher commander's intent, the squadron and ACTs may be required to impede and harass the enemy with organic and supporting fires and, within its capabilities, destroy or repel enemy reconnaissance elements without becoming decisively engaged. See figure 3-9 for screen locations.

Critical Tasks for Squadron Screen Missions

3-96. Critical tasks of the squadron conducting a screen mission are as follows:

- Provide early warning of enemy approach.
- Maintain continuous surveillance of all battalion-size avenues of approach into the sector.
- Gain and maintain enemy contact and report enemy activity.
- Destroy, repel, or suppress enemy reconnaissance units (within capabilities) without becoming decisively engaged.

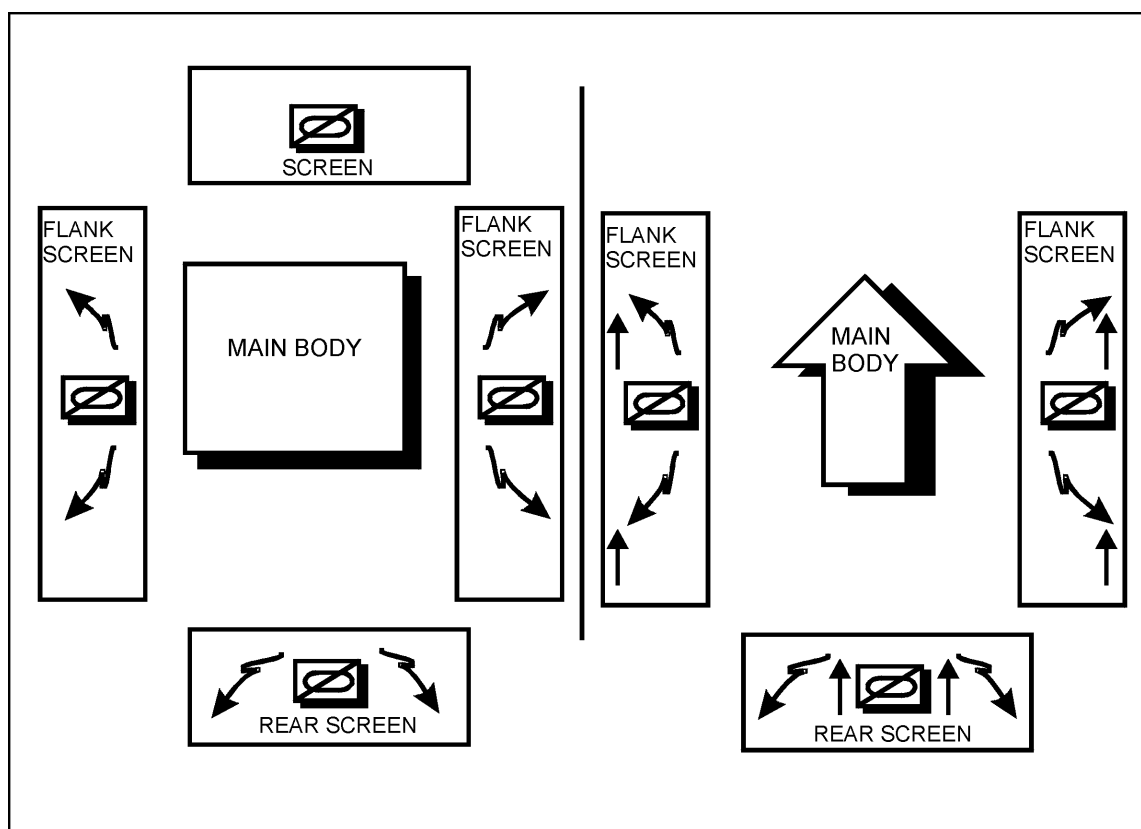


Figure 3-9. Screen locations

- Impede and harass the enemy with indirect fires.
- Guide reaction forces.

Critical Tasks for the Air Cavalry Troop

3-97. The critical tasks for the ACT conducting a screen mission are as follows:

- Maintain continuous surveillance of all battalion-sized avenues of approach into the sector.
- Destroy or repel all enemy reconnaissance elements within capabilities and as directed by higher commander.
- Locate the lead elements of the enemy order of battle and determine their direction of movement.
- Maintain contact with the elements, report their activities, and harass the enemy while displacing.

Air Combat Operation

3-98. Though not a specific critical task, the air combat operation is an implied task during security operations. To be effective, security operations must prevent interdiction by enemy air and ground maneuver forces.

CAPABILITIES

3-99. Air cavalry is ideally suited for screen missions due to its superior mobility, day and/or night target acquisition ability, and long range digital and/or voice communication capabilities. ACTs may conduct screen operations independently or as an integral part of a larger unit's task organization. When participating in guard and cover operations, ACTs normally screen or conduct zone reconnaissance as part of a larger force's guard or cover mission.

SQUADRON PLANNING CONSIDERATIONS

3-100. Squadrons normally perform a screen with organic assets. However, attachments such as engineers, MI assets, or artillery are sometimes needed. For division cavalry, DS artillery will be required when the squadron is operating out of main body artillery range. In the RAS, a ground troop may be attached to assist the air assets in screening a vulnerable part of the regiment. When a brigade is conducting independent operations, an air or GCT from the DCS may be OPCON or attached to screen in support of the brigade's operations. When this occurs the troop should receive DS artillery.

3-101. Squadrons can screen broad areas to the front, to the flanks, or to the rear of a stationary main body or to the flanks or rear of a moving main body. It must impede and harass the enemy with organic and supporting fires and, within its capabilities, destroy or repel enemy reconnaissance elements without becoming decisively engaged.

OFFENSIVE ENGAGEMENTS

3-102. To exploit enemy vulnerabilities and weaknesses, the squadron may maneuver to the flanks and rear of the enemy to conduct offensive engagements. It may also use this employment principle to perform other security tasks as well as special-purpose and JAAT operations.

TROOP PLANNING CONSIDERATIONS

3-103. The ACT commander plans his concept using the following critical considerations:

Aircraft Rotation

3-104. Based on the rotation method selected by the SCO, the troop commander determines methods of rotating aircraft to sustain an aerial screen. He must consider all aspects of the mission—time required for the mission, aircraft availability, the use of AHs, relief on station.

ACTM Organization

3-105. The troop commander organizes ACTM s based on the SCO's guidance, likelihood of enemy contact, size of assigned sector, duration of the mission, and aircraft availability. If large frontages or several avenues of approach need to be covered, the troop commander may break the unit down to teams instead of platoons. When augmented with AHs, they may remain immediately available in a FAA or task organized into the platoon and/or team elements, to use their onboard sensors.

COORDINATION

3-106. The troop commander ensures the location of AHs, FARPs, supporting fires, and FAAs are known by all aircrews. The commander coordinates his concept closely with the ground commander. He must pay particular attention to OP locations, artillery positions, and ground scheme of maneuver. Coordinating the air passage of lines when operating forward of ground troops is essential.

DISPLACEMENT TO SUBSEQUENT SCREEN LINES

3-107. As the enemy situation threatens the security of the screening force, the squadron and/or troops report and request movement to the next screen line. Staggered movement off the screen line allows the commander to identify the flanks and rear of attacking forces. The screening force commander usually decides when to move from a screen line. However, the main body commander decides when the screening force may move behind the rear boundary PL. Prompt, accurate reporting is essential to prevent decisive engagement. Maximum use is made of surveillance, acquisition, and aircraft sensors.

POSITIONING OF COMMAND AND CONTROL AND COMBAT SERVICES SUPPORT ASSETS

3-108. The commander positions himself to where he can best control the screen. Normally this is at a vantage point from which he can move freely, maintain communications with both higher and subordinate commanders, and best influence the battle. In the RAS, the SCO typically performs this function in his aircraft. In the DCS the SCO normally commands from the TAC CP, TOC, or a C² designated aircraft. Combat trains are normally positioned behind masking terrain close enough for rapid response. They are best placed along routes providing good mobility laterally and in-depth. In the DCS and the RAS, FARPs are placed forward to facilitate rapid turnaround of aircraft supporting the screen. CSS assets prepare for extended operations as necessary.

STATIONARY SCREEN

Successive Screen Lines

3-109. Successive screen lines are located one behind the other on the battlefield and provide the screening force maneuver space. A stationary screen is accomplished by establishing successive screen lines. These lines enable the screening element to observe the identified avenues of approach throughout the squadron's AO. Avenues of approach are not split between

units. The ACTM should be assigned no more than three battalion-size avenues of approach. A screen line may consist of OPs placed along a PL overwatching avenues of approach into an area. OPs may be mounted or dismounted from both air and ground assets. If the factors of METT-T dictate, ground scouts of the regiment and/or squadron may dismount from their vehicles and establish OPs. If OPs are used, air and ground reconnaissance forces actively patrol between them. Patrols reconnoiter areas that cannot be observed from an OP.

Initial Screen Line

3-110. The most secure method of establishing an initial screen line is to conduct a zone reconnaissance from the rear boundary to the initial screen line. When squadron units reach the general trace of the screen line, they reconnoiter and refine it. They also select positions for good observation and fields of fire. Reconnaissance elements seek to remain undetected while reporting enemy forces and engaging them with indirect fires at maximum range. Fires are planned along with both natural and man-made obstacles to impede the enemy's advance. The combination of obstacles and coordinated fires allows the squadron to impede enemy lead elements, maintain contact, and avoid decisive engagement. This gives the main body reaction time and maneuver space to effectively engage the enemy. The squadron may also continue reconnaissance forward to identify enemy second echelon and follow-on forces. Upon contact, the squadron focuses its efforts on the destruction of enemy reconnaissance elements by direct and indirect fires before the enemy can penetrate the initial screen line.

3-111. As enemy pressure threatens the security of the screening force, or the movement of the main body dictates, the squadron or ACTs report and request to move to the next screen line. Reconnaissance elements rapidly move from a screen line while maintaining visual contact with the enemy. Staggered movement off the screen line allows the commander to identify the flanks and rear of attacking forces. This procedure ensures that gaps occurring during movement are quickly closed. The procedure is repeated as necessary. Figures 3-10 and 3-11 illustrates the RAS and DCS graphics, respectively, for screening operations of a stationary force. The main body commander decides when the screen force is no longer necessary and allows the screening force to conduct follow-on missions. Therefore, the screen force commander must be prepared to conduct guard operations. Maximum use is made of surveillance, target acquisition, and night observation equipment.

3-112. The ACT conducts a screen for a stationary force when the main body commander is preparing for future tactical operations. During reconstitution activities or planning and preparation phases, the main body commander may remain stationary. The ACT may be assigned screen operations when ground forces are preparing for defensive or offensive operations before actual movement begins. Initial occupation of a unit BP may also require screening activities.

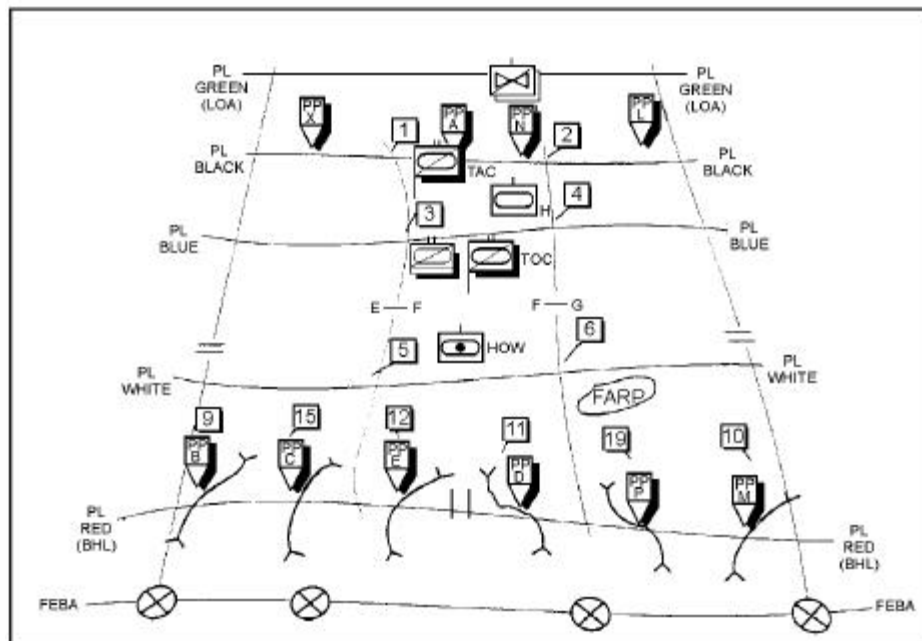


Figure 3-10. RAS Stationary Screen Graphics

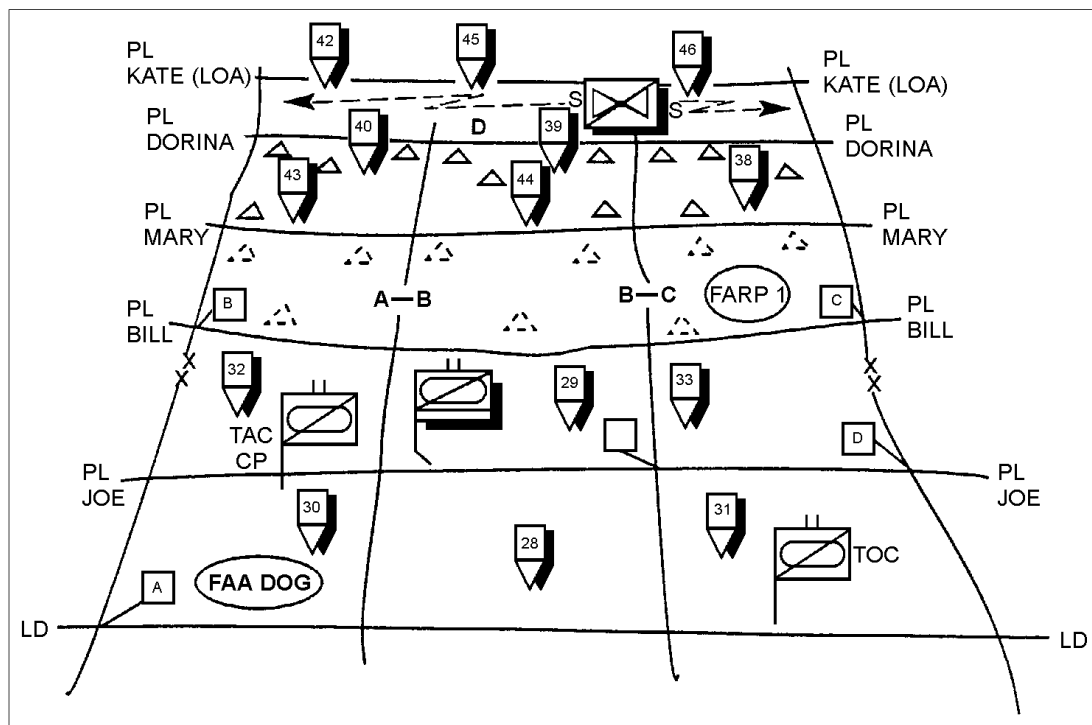


Figure 3-11. DCS Stationary Screen Graphics**Task Organization**

3-113. The ACTM is task organized by the air mission commander to accomplish its screen mission. The AMC assigns teams to occupy the screen and establishes a troop or team rotation to maintain continuous surveillance. If the troop requires relief on station from elements from another troop, the AMC coordinates with the relieving unit to determine the technique to be used. ACTMs relieve each other by aircraft, by team, or by troop. In each case the AMC for the screening troop links up with the incoming air mission commander and communicates the current friendly positions, enemy situation, and plan for relief. When the squadron AMPS is used to maintain a situational awareness net, the relieving troop should arrive with updated graphics requiring less time to conduct handover.

Initial Contact

3-114. When contact is made the ACTM responds by immediately reporting and maintaining contact. Spot reports from the ACTM update the squadron commander on the tactical situation. This gives the main body commander time to maneuver the ground units to engage the enemy. If directed, the ACTM may use indirect FS or organic fires to destroy or repel the enemy's reconnaissance elements.

Cover and Concealment

3-115. ACTMs make maximum use of cover and concealment and employ supporting fires to harass and impede enemy elements. Each screen is situated to maximize the ACTMs ability to maintain observation of the battlefield. Team leaders work together to ensure that FOVs overlap to prevent the enemy from passing unnoticed. Air routes to and from succeeding screen lines should provide good cover and concealment. Cover may be difficult to obtain along a route, but concealment is critical. During movement, the teams ensure that visual contact with the enemy is continuously maintained.

MOVING SCREEN

3-116. A moving screen is conducted when the main body is moving either in the attack or in retrograde. The squadron commander determines the technique of screening a moving force based on METT-T, the maneuver force commander's intent, and the squadron's orientation. The maneuver force commander assigning the screening mission provides the parameters of the screen and the times and locations the screen is to be established. He also identifies the unit or units to be screened and provides the HHQ graphics (operations overlay and control measures). The two types of moving screens are flank and rear.

Flank Screen

3-117. The moving flank screen is the most difficult screening mission. Elements screening on the flank of a moving force move on a route parallel to the axis of the main body movement. The squadron commander defines the area to be initially screened and subsequent screen lines. He designates the last line as the squadron rear boundary. Squadron elements occupy a series of OPs on the screen line parallel to the route of advance. A ground reconnaissance troop is well suited for this mission. The forward element maintains contact with the forward element of the lead elements on the near flank of the main body. The main body and the screening unit must maintain contact at all times. When operating with ground troops in a moving flank screen mission, ACTMs are well suited to maintain contact with the main body and to perform reconnaissance forward of the ground units. When maintaining contact with the main body, the ACTM must be aware of the distance of the ground troops from the main body to prevent the over extension of the screen.

3-118. The most forward OP is positioned abeam of the rear of the leading battalion and/or TF and the subsequent OPs are arrayed along the length of the main body. Movement along the flank screen line may be controlled using one of three methods—successive bounds (similar to bounding overwatch), alternate bounds (similar to traveling overwatch), and continuous (similar to traveling). The most secure technique is one in which aircrews move from the trail OP to the most forward OP and works best when the main body is moving slowly. The successive bounds method is shown in Figure 3-12. A less secure technique may be used when the main body is moving faster. It involves all OPs moving forward simultaneously on command to the next OP. The alternate bounds method is shown in Figure 3-13. The screening force may move continuously, using a technique similar to a hasty zone reconnaissance in-depth along the main body's flank. This method is the least secure and least preferred. The continuous method is shown in Figure 3-14. When operating with ground troops in a moving flank screen mission, ACTs are well suited to maintain contact with the main body and to perform reconnaissance forward of the ground units.

3-119. An ACT screening to the flank of a moving unit plans a line of OPs and prepares to occupy each, in turn, as the main body advances. If possible, the ACT reconnoiters out to the maximum range of supporting fires. Except for these procedures, the mission is planned and conducted the same as a stationary screen.

Rear Screen

3-120. Screening the rear of a moving force is essentially the same as a stationary force. As the protected force moves, the squadron occupies a series of successive screen lines. Movement is regulated by the requirement to maintain the time and distance factors desired by the main body commander. Sectors and responsibilities are assigned as in the stationary screen. ACTMs may assume the screen during ground troop movement. In a rear screen, a unit may move to subsequent screen lines without enemy pressure as long as it remains within friendly artillery range and can effectively screen the rear. If enemy contact is made, the squadron executes the screen mission the same as a stationary screen.

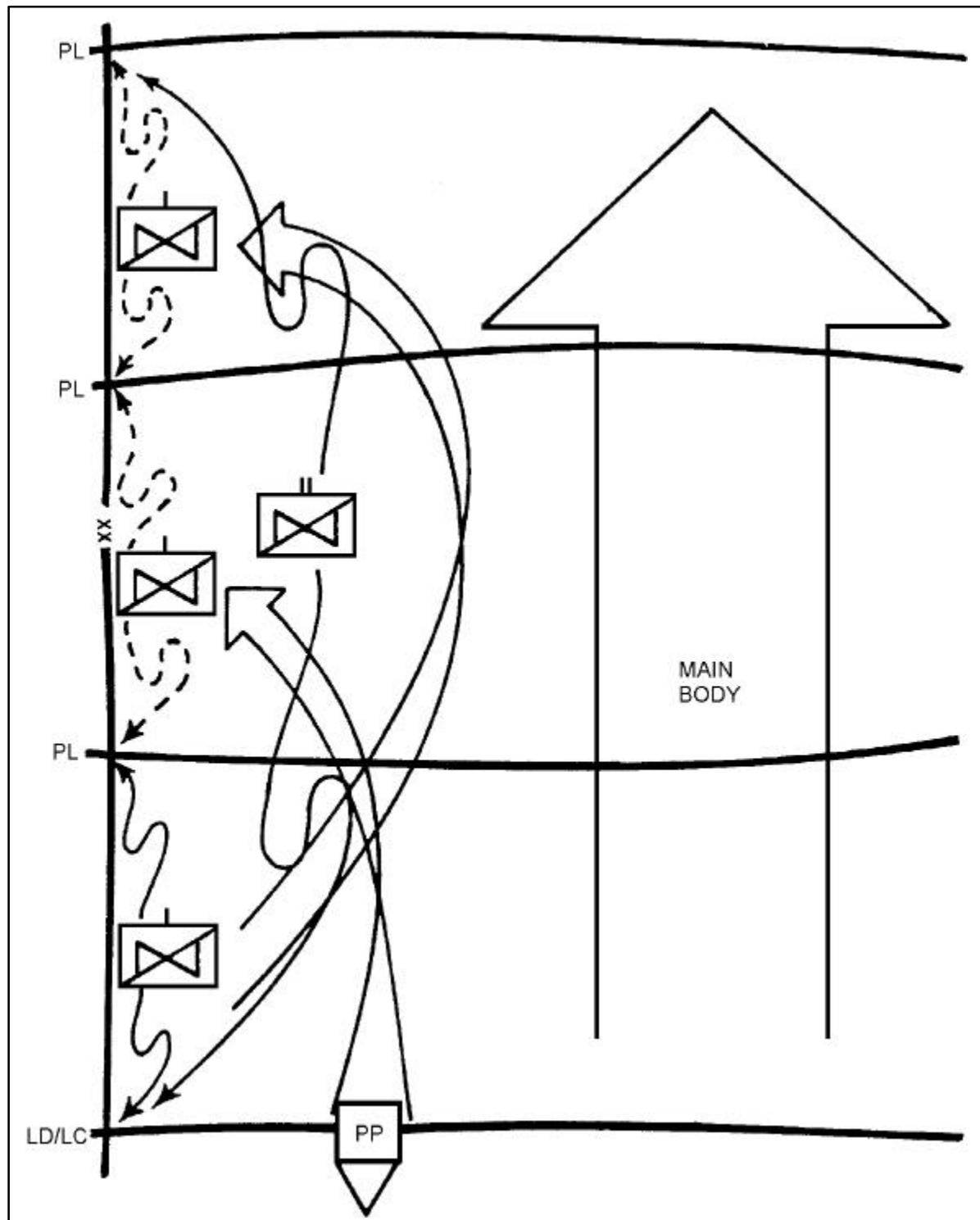


Figure 3-12. Bounding Overwatch or Successive Bounds Method of Maneuver

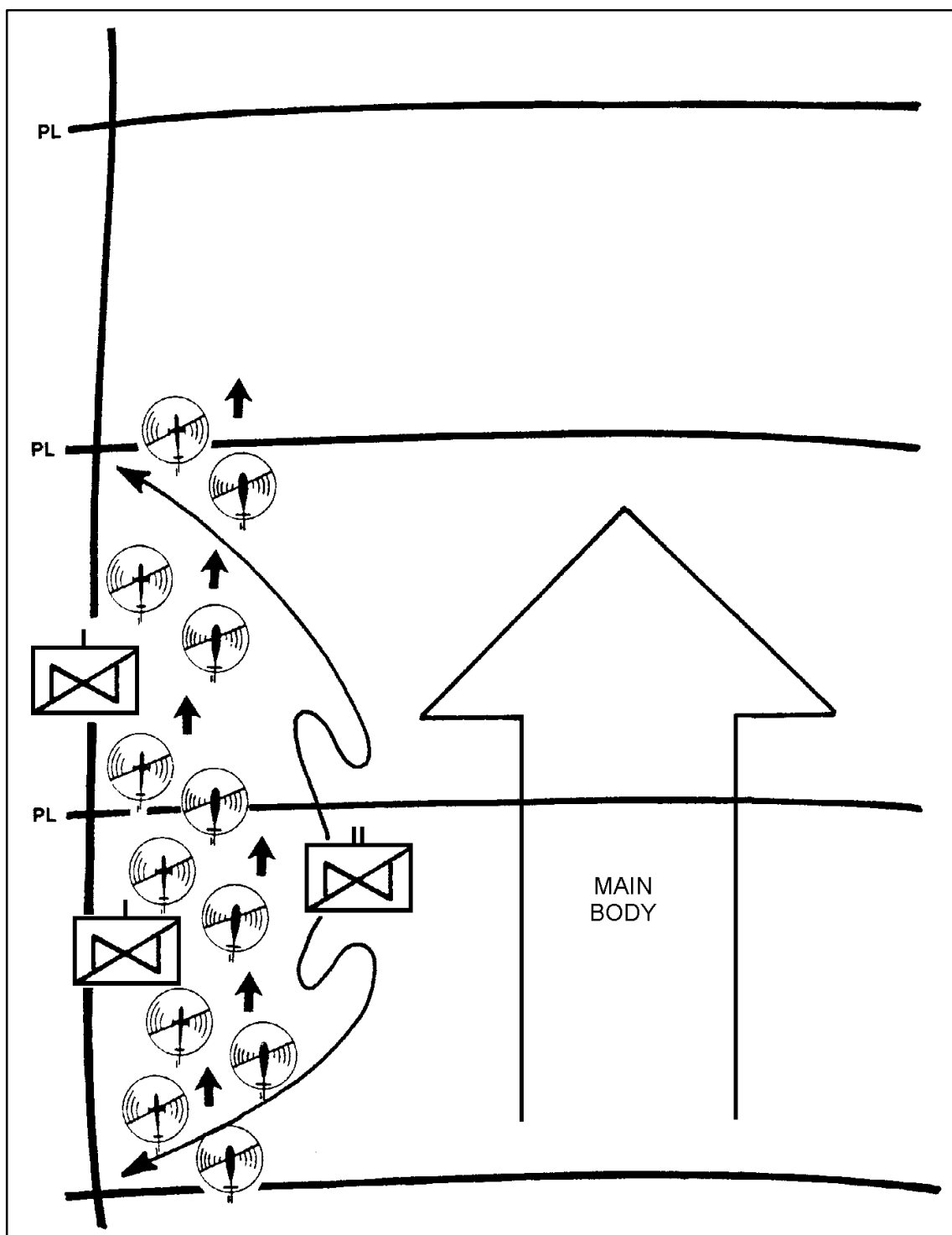


Figure 3-13. Traveling Overwatch or Alternate Bounds Method of Maneuver

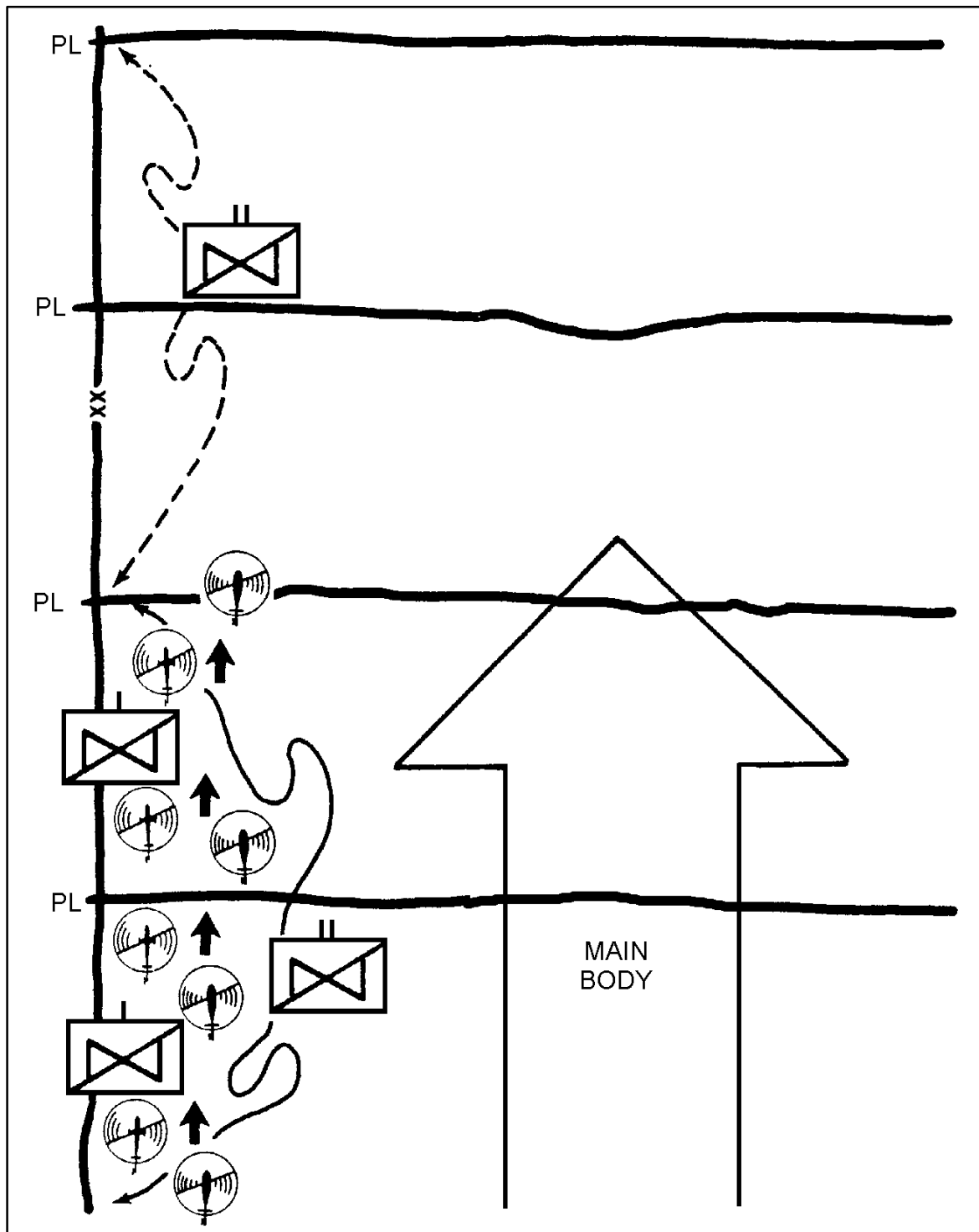


Figure 3-14. Traveling or Continuous Method of Maneuver

REAR AREA OPERATIONS SCREEN

3-121. During rear area incursions conducted by enemy forces, squadron elements may conduct a screen. The purpose of this operation is to maintain contact with and contain the enemy while friendly units maneuver to engage and destroy the rear threat. In this role, squadron forces may guide friendly quick-reaction forces and/or assist in the attack and destruction of the enemy force. Figure 3-15 shows the squadron conducting a screen during a rear area operation.

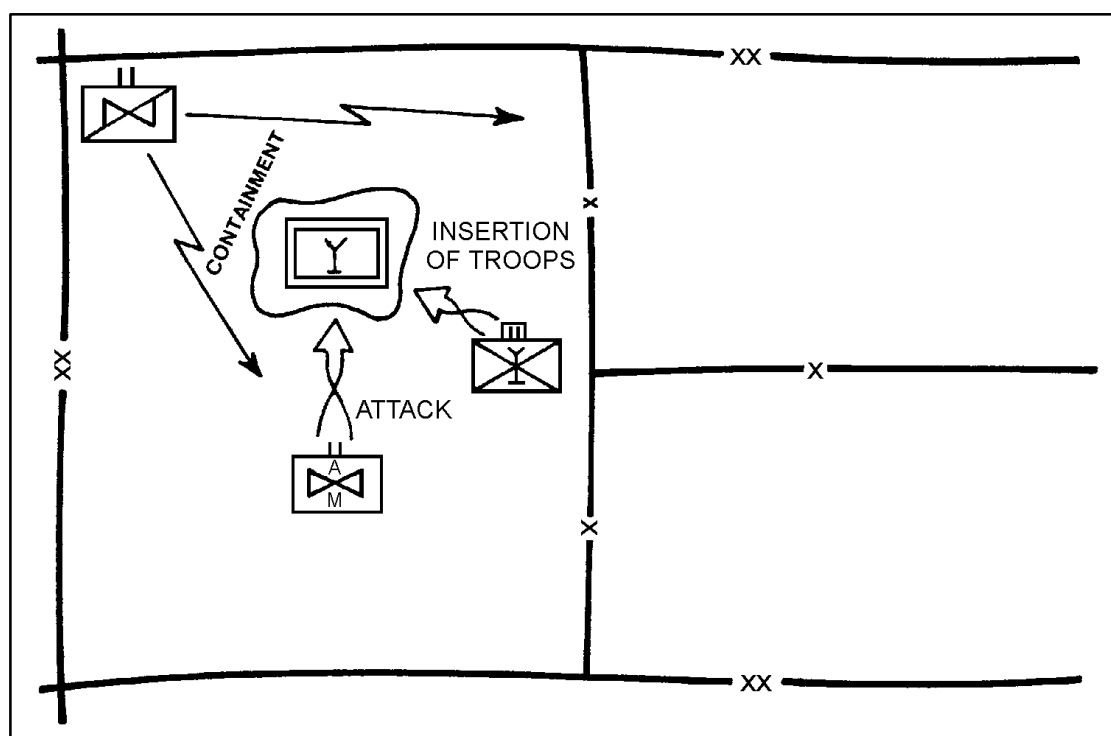


Figure 3-15. Squadron Conducting Screen During Rear Area Operation

SCREENING AGAINST ENEMY AIRCRAFT

3-122. The ACT may operate as a screening force with the mission to alert the squadron and engage approaching enemy aircraft. It is positioned on the flanks and forward of other aviation and ground units conducting operations. The ACT establishes a screen along probable air avenues of approach. It maintains surveillance of these air avenues similar to the way it maintains surveillance of ground avenues of approach. Reports of incoming

aircraft would alert all assets in the area to take appropriate action. To effectively maintain an aerial screen requires the air cavalry unit to be linked with the AD warning system to maintain situational awareness of incoming enemy aircraft.

3-123. To be successful in a screen against the enemy, the ACT should fight as a unit, using maneuver and making the most of available weapons. The troop should also observe the principles of air combat operations. These principles include—

- Avoiding detection.
- Seeing the enemy first.
- Recognizing the enemy.
- Fighting unpredictably.

GUARD OPERATIONS

PURPOSE

3-124. A guard operation protects the main body from enemy ground observation, direct fire, and surprise attack. A guard force reconnoiters, screens, attacks, defends, and delays to destroy enemy reconnaissance elements and to disrupt the deployment of enemy first echelon forces. It accomplishes all the tasks of a screening force. A guard operation is normally conducted within the range of friendly artillery. The squadron may serve as the guard force headquarters, or it may operate under another maneuver headquarters. The guard mission is not normally assigned to an air squadron unless it is augmented from the regiment, division, or corps with ground assets. The intent of the main body commander in assigning the mission determines the nature and extent of attachments required. ACTs within the squadron perform zone reconnaissance, screen, or hasty attack missions. Ground troops within the squadron perform the same missions but also conduct movement to contact, defend, and delay missions. The guard mission requires the squadron to fight the enemy. A guard mission may be conducted to the front, rear, or flanks of the main body.

MISSIONS

Stationary Guard

3-125. A stationary guard is performed when the main body is not moving. It may be conducted to the front, rear, or flanks of the main body but is normally conducted to the front. As part of a stationary guard, the squadron deploys forward of a designated PL, usually within friendly artillery range, and conducts reconnaissance and screening operations. The main guard force does not displace behind the designated PL without the permission of the main body commander. A PL designating the rear of the squadron's area is farther from the main body than the effective range of enemy direct fire weapons (roughly 4,000 meters). The squadron conducts a zone reconnaissance from the rear to the BPs or OPs, reconnoiters the BPs or OPs, and establishes a screen line. It provides reaction time for the main guard force and, consequently, the main body. The squadron determines the

enemy's disposition, destroys enemy reconnaissance elements, and assists the main guard unit in forcing the enemy to deploy. It also disrupts the enemy's forced deployment and guides main body reaction forces for the counterattack. Figure 3-16 shows a squadron conducting a stationary flank guard.

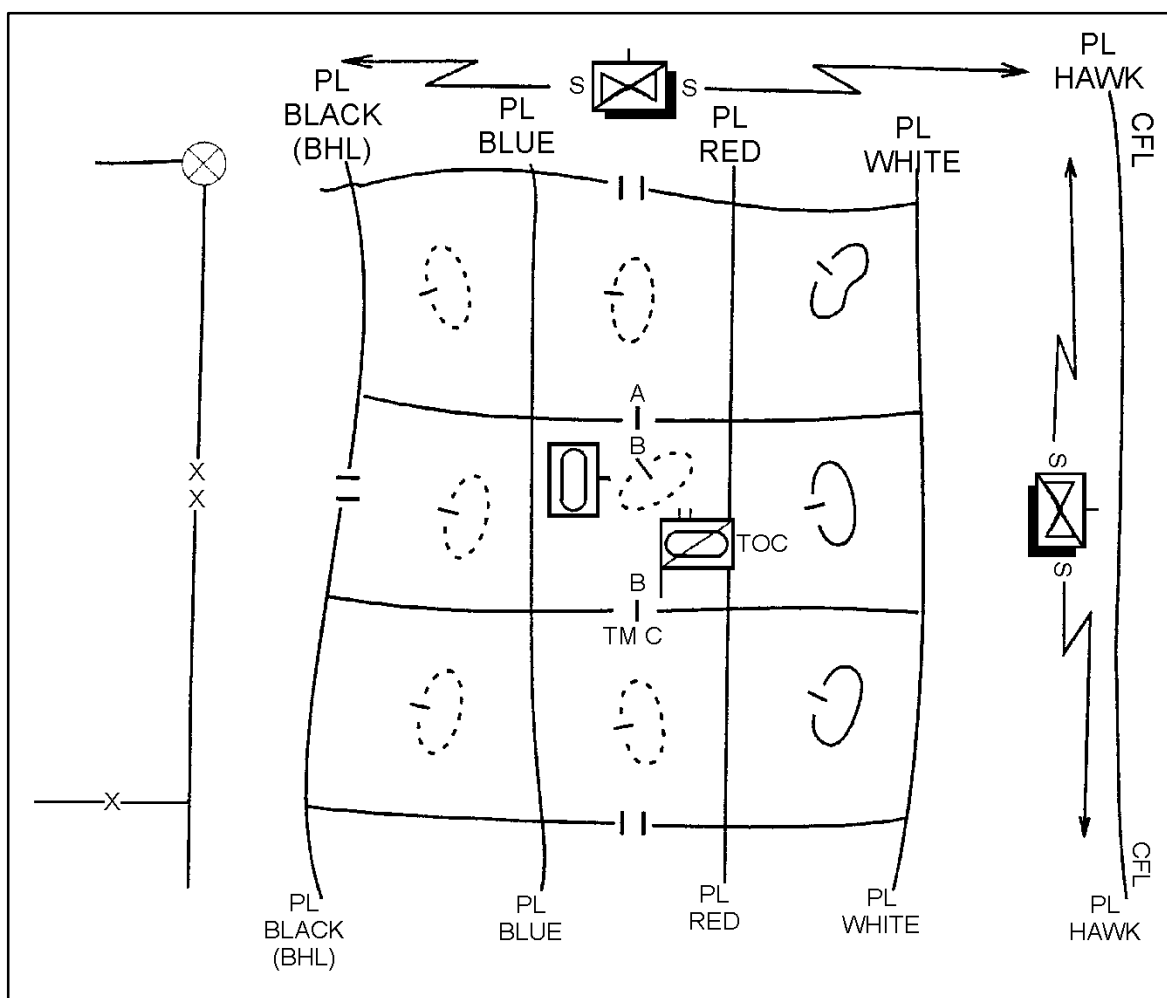


Figure 3-16. Squadron Conducting a Stationary Flank Guard

3-126. Advanced Guard. An advance guard force is offensive in nature. It finds and defeats enemy units along the axis or route of advance and prevents surprise and premature deployment of the main body. The squadron, augmented by brigade, regiment, or division, is given the overall advance guard mission. As a member of an advance guard, the air cavalry deploys forward in a zone or a route reconnaissance.

3-127. Flank Guard. As a flank guard, the squadron performs the same tasks as it does for a stationary force. However, a flank guard for a moving

force advances systematically to a series of BPs or OPs parallel to the main body's axis of advance and clears the area between its route and the main body, as the main body advances. The guard force orients on enemy battalion-sized avenues of approach. Flank guard activities are primarily reconnaissance oriented. Air cavalry can be integrated as part of the guard force by screening between and in front of BPs as they are established. Air cavalry may also be used to reconnoiter the area between the guard force and the main body, maintaining contact with both elements and freeing the ground cavalry flank guard force to concentrate on its BP tasks.

3-128. **Rear Guard.** The squadron performs the same tasks for a moving force as it does for a stationary force. During the advance of the main body, the rear guard detects and defeats enemy units that threaten the rear of the protected force. It conducts a delay without contact at a distance prescribed by the main body commander. The delay operation is normally within friendly artillery range and is oriented away from the main body's rear on the same axis of advance. The squadron's primary role is to screen the guard force as it delays, while the main body advances. Air cavalry screens forward or between BPs and may reconnoiter the area between the rear guard and main body.

Moving Guard

3-129. Moving guard operations may be conducted to the front, flank, and rear of the main body.

3-130. **Advance Guard.** An advance guard for a moving force develops the situation to the front along specific routes or axes to prevent surprise or premature deployment of the main body. It plans as in a zone or route reconnaissance but will usually have a more lenient engagement criteria. An advance guard must have artillery coverage. The main body is normally in a movement to contact. The advance guard develops the enemy situation by fighting to gain intelligence. Air cavalry is expected to plan its part of the mission the same way it would a zone reconnaissance. Primary emphasis is on early development of the enemy situation in the area of the main body's route or axis of advance.

3-131. **Flank Guard.** As a flank guard, the squadron performs the same tasks for a moving force as it does for a stationary force. However, the flank guard for a moving force advances systematically to a series of BPs. It moves along a designated route parallel to the main body's axis of advance and clears the area between its route of advance and the main body. Flank guard activities are primarily reconnaissance-oriented. During a flank guard, air cavalry can be used to screen between the guard force and the main body. It can also be used to screen forward of the guard force during the movement to BPs. In both situations air cavalry uses the techniques for a movement to contact forward of a moving force (a zone reconnaissance moving to successive screen lines). Figure 3-17 shows the squadron with augmentation conducting a flank guard for a moving force.

3-132. **Rear guard.** The squadron performs the same tasks for a moving force as it does for a stationary force. However, it must periodically move rearward to stay within the range of the main body's artillery.

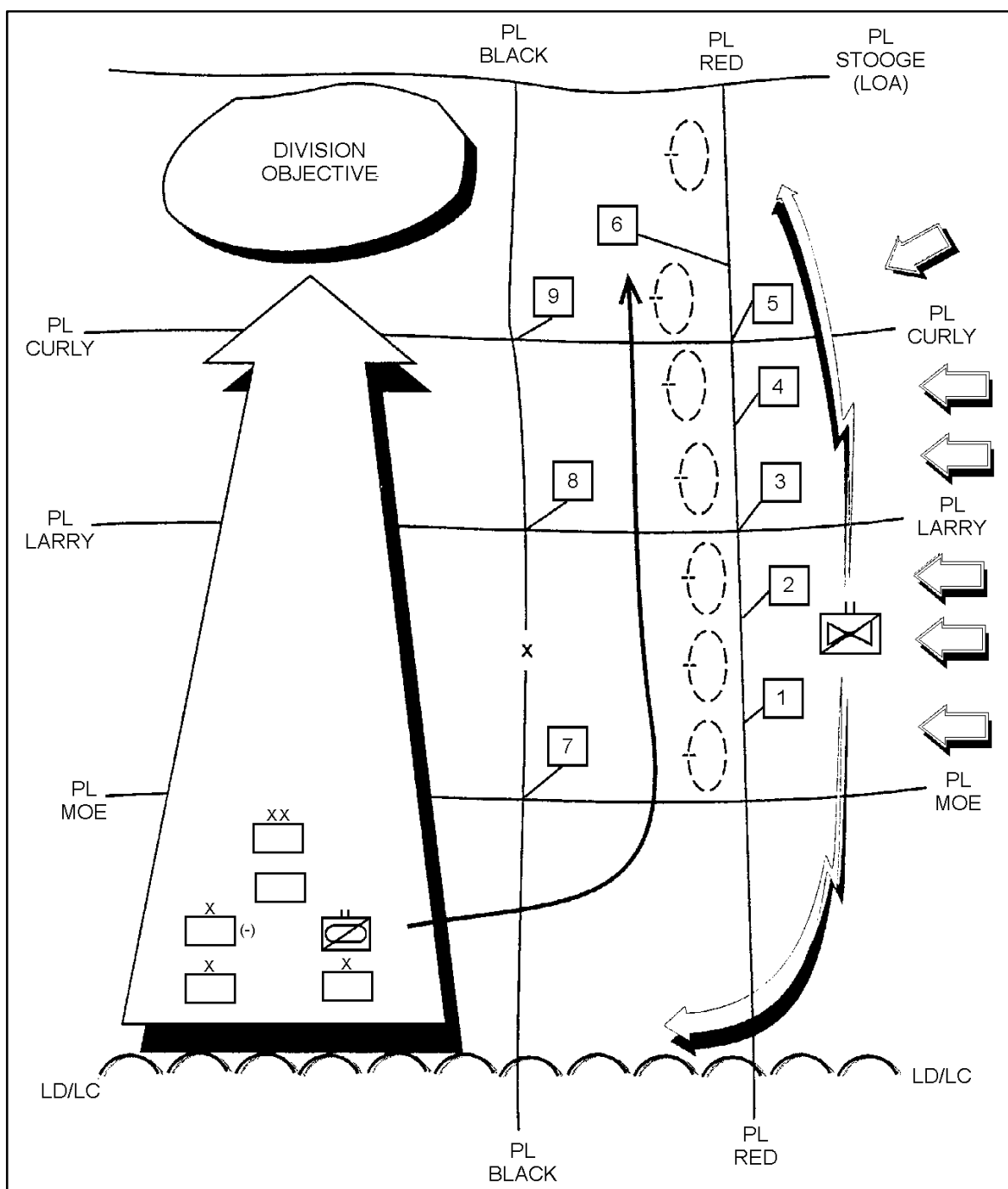


Figure 3-17. Squadron (Augmented) Conducting a Flank Guard for a Moving Force

AIR CAVALRY SQUADRON AND AIR CAVALRY TROOP CRITICAL TASKS

3-133. The following tasks are critical tasks performed by the ACS or ACT:

- Perform reconnaissance along the main body's axis of advance.
- Maintain continuous surveillance of enemy battalion-size avenues of approach.
- Maintain contact with the lead combat element of the main body.
- Reconnoiter the zone between the main body and the guard force BPs.
- Destroy or repel enemy reconnaissance and security forces.
- Defeat, repel, or fix enemy ground forces before they engage the main body with direct fire.

PLANNING CONSIDERATIONS

3-134. The commander assigning the guard mission must indicate the type and level of protection required. Because guard forces are expected to force and disrupt enemy deployment, they normally operate on narrower fronts than screening forces. A commander directing a guard mission must consider the requirement to clear the area between the main body and the units' guard-designated positions. The guard force may need additional assets to clear this area while keeping enough combat power forward to protect the main body. Guard units may have FA in DS or priority of fires from designated FA units. This assistance depends on the amount of artillery support available and the type and level of protection required by the commander who assigns the guard mission. Normally, guard units occupy BPs across the most likely avenues of approach. They do not withdraw to successive positions without the permission of the main body commander. The guard force commander may direct movement to successive screen lines. Troops within the squadron will often have different missions. For example, one troop may screen a less vulnerable zone while the remaining troops screen an area with critical avenues of approach.

COVERING FORCE OPERATIONS

PURPOSE

3-135. The covering force accomplishes all tasks of screening and guard forces. Additionally a covering force operates apart from the main body to develop the situation early and deceives, disorganizes, and destroys enemy forces. A covering force is tactically self contained and capable of operating independently from the main body. The covering force mission is normally assigned to the ACR.

REGIMENTAL AVIATION SQUADRON

3-136. The RAS is an integral part of the ACR's covering force operations. On the nonlinear battlefield, a successful covering force may continue attacks into vulnerable enemy flanks and rear areas in one sector while the battle is handed over in another sector. The ATKHT is well suited for raids into enemy rear areas to disrupt follow-on forces, facilitating the complete

destruction of the enemy's first echelon. The covering force operation is conducted as a zone reconnaissance to fully develop the situation. The RAS is tailored to augment the ACR and accomplish this task. It may be required to destroy enemy reconnaissance and advance guard units and to force enemy first echelon elements to deploy. The covering force also locates and breaches the defenses of a deploying or deployed enemy force. The covering force may not bypass an enemy force without the permission of the covering force commander. Adequate close support for the covering force is one FA battalion per maneuver squadron or TF. Organic FA assets consist of one FA battery per armored cavalry squadron. The covering force develops situations earlier, fights larger enemy forces longer, and defeats more enemy forces than a guard force. The two basic types of covering forces are offensive and defensive.

OFFENSIVE COVER

3-137. An offensive cover force operates to the front and flanks, preventing surprise and establishing contact with the enemy's main body. They also protect the main body from detection or engagement by enemy security forces bent on stopping the momentum of the attack.

Offensive Covering Forces

3-138. Offensive covering forces perform the following functions:

- Deny the enemy information about the size, strength, composition, and objectives of the main body.
- Develop the enemy situation to determine enemy strengths and disposition.
- Destroy enemy reconnaissance and security forces.

Advance Covering Force

3-139. The RAS's role as part of an advance covering force is to conduct a zone reconnaissance or movement to contact in concert with the armored cavalry squadrons to develop and influence the situation. The RAS will augment the armored cavalry squadrons in the reconnaissance and may conduct a screen. The RAS, as an integral part of the covering force, assists in locating and penetrating the security and forward defensive zones of an enemy force deployed or deploying to defend. It also assists the covering force in destroying enemy reconnaissance and advance guard units and in forcing first echelon regiments of a moving enemy force to deploy. As the covering force headquarters, the ACR may be reinforced with such assets as AHs, air assault forces, FA, TACAIR support, engineers, AD, TFs, and CS units. An advance covering force conducts movement to contact boldly on a broad front. The distance it operates forward of the main body depends on the intentions and instructions of the main body commander. This distance also depends on the terrain, the enemy's location and strength, the main body's rate of march, and the ACR's advance.

3-140. While conducting covering force operations, the ACR normally retains a reserve. The reserve force may be attached infantry or tank assets and may include elements of the RAS. The reserve force may be centrally located, ready to deploy anywhere in the squadron zone, or located in the most

dangerous part of the zone. It may be positioned to support the commander's tactical scheme of maneuver by executing a mission such as attacking a vulnerable flank identified earlier by an ACT. The reserve must be prepared to attack, counterattack, or occupy BPs. When the covering force can advance no farther, the reserve defends and assists in the main body units' passage of lines. Enemy flanks and gaps are actively sought and immediately reported and exploited. The RAS may guide main body units as they attack through and around the covering force. Figure 3-18 shows the RAS as part of an advance covering force.

3-141. Air cavalry normally reconnoiters forward of advancing ground squadrons and battalions. Upon enemy contact, the air cavalry reports the enemy location to the ground unit in that zone and maintains contact. Once contact is made, the situation is rapidly developed. Air and ground scouts call in supporting artillery fires, and the enemy force is fixed and destroyed by fire and movement. The covering force will not bypass enemy forces without the permission of the main body commander.

Flank Covering Force

3-142. The flank covering force normally covers only one flank of the main body. As part of a flank covering force operation, the RAS may conduct flank screening or guard operations (when augmented). Tasks differ in the scope of operations and the distance from the main body. The main body commander specifies how and when a covering force will assume a flank covering force mission.

DEFENSIVE COVER

3-143. A defensive covering force operates to the front, flank, or rear of the main body. As part of a defensive covering force, the RAS may conduct reconnaissance and screening operations and act as a rapid-reaction force for counterattacks and reinforcements.

Defensive Covering Force

3-144. A defensive covering force forces the enemy to deploy into attack formations. It identifies, disrupts, and destroys enemy follow-on forces. It deceives the enemy about the location of the FLOT or FEBA and forces it to deploy first and second echelon elements prematurely. It destroys AD elements of enemy first echelon forces. The defensive covering force determines the strength of the enemy and the location of its main attack. It destroys enemy reconnaissance, advance guard, and first echelon elements. It also reinforces the terrain with barriers and obstacles to slow the enemy's advance.

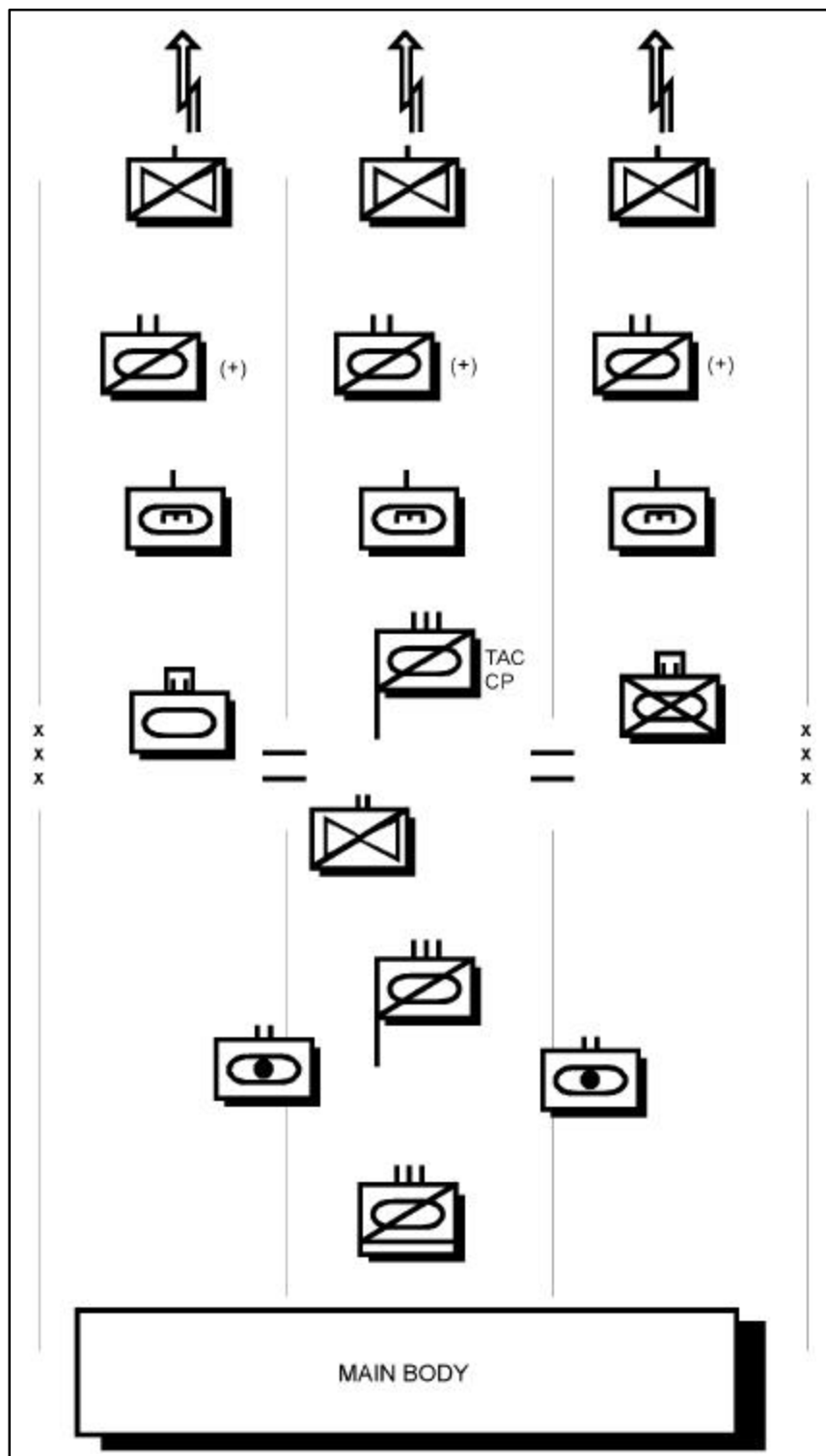


Figure 3-18. RAS as Part of an Advance Covering Force

Rear Covering Force

3-145. A rear covering force for a unit moving away from the enemy first deploys behind forward maneuver units of the main body. Then it defends or delays. This line may be behind the main body's forward brigades or divisions, depending on available space and whether the main body is already disengaged. Usually, the RAS deploys behind forward brigades or divisions. Troops establish passage points; assist with the withdrawal of the main body, if necessary, and prepare to reorient in any direction.

AIR ASSAULT SECURITY OPERATIONS

Air Assault Operations

3-146. Air assault operations are conducted to rapidly disperse and concentrate forces at the critical time and place to influence the tactical situation. These forces can be extracted quickly and employed in a different area. Air assault forces can quickly bypass forward enemy units and achieve surprise in a swift, violent, and bold operation to deceive, destroy, and disrupt. Air assault operations are directed primarily toward destroying enemy personnel and equipment and disrupting C². They also obtain information about enemy installations, units, and activities and force the enemy to concentrate in more than one area. Air cavalry assets are a key element in air assault operations. The aviation brigade and the AATF commanders must integrate air cavalry assets into the scheme of maneuver. ACTs are normally employed as part of a squadron mission to conduct reconnaissance, screening, or overwatch operations during all five phases of an air assault operation. These phases are staging, loading, air movement, landing, and ground tactical.

3-147. **Staging Phase.** Air cavalry assets may conduct screening operations to provide early warning and limited security while friendly troops form on or near the PZs. If enemy forces are close by or contact is likely, the cavalry may conduct special-purpose operations, such as feints or demonstrations away from the staging areas or PZs.

3-148. **Loading Phase.** ACT reconnoiters PZs before the arrival of assault helicopters. Once the PZ is cleared, air cavalry elements may screen a vulnerable flank or likely avenues of approach.

NOTE: Ground troops are also well suited to participate in providing security in the first two phases of an air assault operation.

3-149. **Air Movement Phase.** Air cavalry elements normally precede the AATF along the air route. They conduct a route reconnaissance followed by an area reconnaissance of the LZs and possibly the objective, depending on the factors of METT-T. Air cavalry assets penetrate the FEBA or FLOT at a time interval dictated by the mission and conduct or assist with an air passage of lines. Along the route, they locate enemy AD weapons and radars and suppress those systems or develop a bypass route for the AATF. Air cavalry assets also provide pertinent information about a route that poses a threat to flight, including all natural and man-made obstacles. Although AHs normally provide en route security or overwatch, air cavalry assets may perform this mission. This is accomplished by a moving flank or security or

by occupying BPs along the route. Air cavalry assets provide early warning of the enemy's approach and can then engage the enemy with organic weapon systems or through adjusting indirect fires. They may also be assigned responsibility for the recovery of all downed aircrews throughout the operation.

3-150. **Landing Phase.** Air cavalry assets perform the same tasks during the landing phase as it does during the staging and loading phase. They may occupy BPs to overwatch the LZs as well as the objective.

3-151. **Ground Tactical Phase.** As the ground force moves toward and seizes its objective, air cavalry assets may again conduct reconnaissance and screening operations. They can rapidly reconnoiter the ground route to the objective as well as the objective itself from stand-off ranges. Air cavalry assets can also screen the main body's movement to the objective and provide close in FS on the objective from BPs. Air cavalry assets can also provide overwatching fires during the extraction.

Fire Support

3-152. Planned fires along the route of flight support aircraft flying past areas of known or suspected enemy positions. These fires should be intense and of short duration because of aircraft speed past specific locations. They are planned on areas and scheduled at times when flights are endangered. Fire plans may cover PZs, LZs, flight routes, and suspected enemy avenues of approach to LZs. FS plans include lethal SEAD, nonlethal SEAD, and smoke to protect formations from enemy detection. Plans should ensure the friendly FS elements do not use ordnance that obscures aircrew vision, especially during NVG missions. Whenever possible, operations should take advantage of the coordinated effects of all elements of the combined arms team. Coordinating and synchronizing actions with USAF support packages provides greatly enhanced effects and increases survivability.

3-153. Available FS is used to suppress or destroy enemy weapons. FS is provided by TACAIR, FA, mortars, and NGFS. Support may consist of smoke (rocket fired or projectile or canister delivered), chaff (air dropped), or other countermeasures for SEAD operations. On-call fires are planned along the flight route to ensure rapid adjustment on targets of opportunity. Requests for FS are made through the squadron FSO. TACAIR may be coordinated directly if the FAC is on station. The FS request used is frequently of an immediate nature.

AREA SECURITY

3-154. An area security force performs screen, guard, or cover to protect forces within a specified area. The area is delineated by the headquarters assigning the area security mission.

3-155. It is commonly employed around an airhead or lodgment following airborne, air assault, or other forced entry operations. It is also used extensively in stability operations and support operations and will become the norm for operations on the nonlinear, noncontiguous battlefield. Area security should be used to provide early warning to any isolated force that cannot tie its flanks into a friendly unit.

3-156. A screen is established, integrating OPs, ground surveillance radar, and patrols. If available, tanks and antiarmor weapons systems are placed on restrictive or highly restrictive terrain and high-speed avenues of approach. Likely enemy DZs or LZs are identified and kept under observation. Air cavalry assets are integrated into the R&S plan.

3-157. Route security is performed to provide early warning and reaction time to forces moving along, or dependent upon, a route or line-of-communication. ACTs within the regiment or squadron could conduct any of the following missions:

- Screen.
- Zone, area, and limited route reconnaissance.
- Hasty attack.

3-158. Convoy security is a variation of route security that is performed when conducting security for the entire route is not feasible. This may be because of the length of the route, strength of enemy forces, or the limitations of available security assets. The integration of air and ground forces during convoy security operations works best. Air cavalry may conduct limited route reconnaissance in conjunction with a zone reconnaissance forward of the scout platoons that are better suited for the escort element. Air cavalry may additionally conduct a flank and rear screen as the convoy moves along the route. Finally, AHs (RAS) or armed scouts make an excellent quick reaction force in the event of an ambush.

SECTION IV—OFFENSIVE OPERATIONS

MOVEMENT-TO-CONTACT

3-159. A movement-to-contact gains initial ground contact with the enemy or regains lost contact. Cavalry performs the movement to contact like a zone reconnaissance. Unlike a zone reconnaissance, the effort focuses on finding the enemy force, developing the situation early, and preventing the premature deployment of the main body following the cavalry. Terrain reconnaissance is conducted as necessary to support the intent of locating the enemy. As a result, movement-to-contact proceeds much faster than a zone reconnaissance.

3-160. The ACR, when conducting a movement-to-contact as an independent force, task organizes to provide a security force (forward to the main body and to the flanks and rear), an advance guard, and a main body. The ACR may assign the movement-to-contact mission to the RAS during the conduct of offensive operations, advance guard, advance covering force, or a regimental movement to contact. The RAS may assign movement-to-contact to its troops during the conduct of any of these missions.

3-161. The DCS, conducting a movement-to-contact as an independent force, organizes itself similarly with security forces, an advance guard, and a main body. The DCS facilitates speed and mobility by using air cavalry to reconnoiter forward of the ground troops or to screen along exposed flanks. The DCS frequently performs this mission when serving as the advance

guard during a division movement-to-contact. The squadron assigns this mission to troops during a squadron advance guard or movement-to-contact.

3-162. The movement-to-contact terminates when the unit reaches the objective or limit of advance without enemy contact or upon contact with an enemy force. The squadron gains contact with the smallest element possible. This is normally ground scouts or ACTMs performing reconnaissance for their troop. Actions on contact occur rapidly at platoon and troop level to defeat the enemy force within its capability and prevent unnecessarily deploying other squadron assets. Should the enemy prove to be too strong, the cavalry establishes a hasty defense, delays, or conducts close reconnaissance as appropriate within the intent of the higher commander. Follow-on main body forces then deploy, conduct battle handover, and assume the fight.

3-163. Using direct and indirect fires and CAS, the ACTMs harass and impede enemy elements to preclude their influence on the main body. The ACT commander can direct ground elements to the vicinity of enemy units and can support those ground elements with fires. If ATKHTs (ACR only) or ATKHB are employed, the ACTMs maintain contact with the enemy and coordinate a target handover with the ATKHT or ATKHB. If the main body is directed to bypass the enemy after initial contact, air cavalry is ideal in the economy of force role. With its organic fire power, air cavalry can maintain surveillance and contain small forces until follow-on elements arrive to destroy them.

3-164. If the DCS is well forward of the division, a FARP may move with the squadron to reduce aircraft turnaround time. In the ACR, the RAS establishes its FARPs far enough forward to support deployed air cavalry assets.

SEARCH AND ATTACK

3-165. The search and attack technique is best used when the enemy is operating in small teams using "hit and run tactics," over a large area in a generally decentralized manner. It is used to locate and destroy enemy forces, conduct area denial, and information collection. The major portions of the search and attack can be broken down into the find, fix, and finish elements.

3-166. The find portion obviously breaks down into a specified type of reconnaissance mission. The specified tasks for the reconnaissance will be dependent on the exact size and composition of the current enemy. The reconnaissance is specifically focused on the enemy force location and composition, it is not focused on the destruction of the enemy. Depending on the enemy force, the reconnaissance can be completed by any type of unit that is habitually trained in reconnaissance missions. Stealth of the reconnaissance force is of great importance. If the reconnaissance force is able to locate the enemy force without being detected, it allows the commander time to develop the situation properly with the fixing and the finishing elements.

3-167. The fix portion may be accomplished in a variety of methods. The most common task would be to block an enemy element from moving along his most likely avenue of departure from the area. This task can be accomplished by mounted or dismounted forces, aviation forces, or by mines and obstacles that are covered by fire. The key to the fix portion of the operation is to ensure your fixing unit is appropriate for the type of enemy force in question, and has the capability to react to the enemy in unanticipated locations.

3-168. The finishing portion may be accomplished by any maneuver force with the combat power to destroy the enemy force in question. The key to success for this portion of the mission is the ability to bring the finishing forces' combat power to bear on the enemy at the key time when he has been located by the finding force, and his egress has been halted by the fixing force.

3-169. The search and attack mission should not be assigned any lower than the squadron level. The squadron has the assets to C² the different aspects of this mission and also has the combat power to apply to accomplish the desired results. The squadron must tailor the subordinate troops' tasks to clearly define their role in the operation. The troops must clearly understand their role as that of reconnaissance to locate, or attack to destroy. The squadron may find itself in the position of conducting one of these subordinate roles in a regimental level search and attack mission.

3-170. The effective search and attack operation is conducted with a great deal of cross talk and coordination between the subordinate elements. Sufficient graphic control measures from the controlling headquarters are essential to the close coordination between the subordinates. The subordinate unit commanders must keep abreast of the current activities and the locations of the other elements to ensure they have their units in the proper location and mission posture to deal with enemy contact when it is made. The clear situational awareness is extremely important due to the fluid environment in which this mission will be conducted.

HASTY ATTACK

3-171. A hasty attack is an attack for which a unit has not made extensive preparations. It is conducted with the resources immediately available to maintain the momentum or to take advantage of the enemy situation. The objectives are to overwhelm the enemy quickly and seize the initiative. Speed is paramount. If momentum is lost, the hasty attack can fail. An attack with speed, audacity, and boldness can offset the lack of thorough preparation.

3-172. The hasty attack depends on timely and accurate information as well as speed. When contact is made, commanders must immediately evaluate their chances of success. Situational information must be passed to HHQ. Possible courses of action include enveloping or bypassing enemy forces or reinforcing the attack.

3-173. When the attack begins, the air cavalry commander employs direct and indirect fires to develop the situation. The air cavalry supplies

battlefield information and situation updates on which the commander can base immediate decisions concerning the attack. It provides suppressive fires for a maneuvering ground element and security to the attacking force through early warning. If additional firepower is needed, the air cavalry facilitates the sequencing of the ATKHB into the battle.

3-174. When planned ATKHB assets arrive, the air cavalry returns to its reconnaissance and security missions. It continues to provide information about alternate attack routes and aerial or ground envelopment routes.

3-175. The air cavalry commander can orchestrate all the FS assets used in a hasty attack, as well as assist ATKHB assets. In the hasty attack, air cavalry primarily provides information to the commander and then orchestrates firepower and maneuver.

DELIBERATE ATTACK

3-176. A deliberate attack is usually necessary when the defender is well organized and cannot be turned or bypassed. A deliberate attack is planned and carefully coordinated with all concerned elements based on thorough reconnaissance, evaluation of all available intelligence and relative combat strength, analysis of all COAs, and any other factors affecting the situation. It has a scheme of maneuver and an integrated FS plan. In the initial phase of the attack, both sides employ all firepower, to include FA and armor. Due to the vulnerability to accurate ground fires, commanders must plan to use maximum standoff ranges, and hours of darkness, when engaging well established enemy defensive positions. Cavalry units seldom conduct deliberate attacks on their own. The security efforts of air cavalry are oriented towards protecting the attacking force from flank and rear area attacks in an economy of force role. This may be the air cavalry's most critical contribution. It allows the ground commander to mass all his forces in the deliberate attack. Surveillance of possible enemy LZs is included in the security role.

3-177. A commander's IPB will determine how the attack is planned and initiated. Because the primary attack route could be modified before the attack begins, situational development is essential. After the initial phase of the attack begins, air cavalry can identify weak points. As the attack continues, immediate reports from air cavalry enable the main body commander to direct his attack at the most vulnerable points. If a feint becomes more successful than the main attack, the air cavalry commander relays this information to the supported commander and can direct forces to the newly defined main attack area.

3-178. If the initial phase of the attack succeeds and friendly forces breach the enemy defenses, the air cavalry moves through the penetration and outward on the flanks where the enemy is weak and fragmented. The air cavalry also locates counterattacking enemy forces, C² centers, logistics centers, and other priority targets. After these have been located, the air cavalry employs indirect fires to destroy them. When ATKHB assets are available, the air cavalry commander identifies and hands over the targets to the attack elements. The air cavalry then resumes its reconnaissance of other targets in the area.

3-179. An attack at night or during limited visibility provides several advantages to the attacker. Surprise and deception are enhanced and opportunities that are impractical during daylight conditions may succeed. Concentration and movement of forces are more difficult to detect and remain concealed longer. The availability of air cavalry assets is carefully weighed during consideration of these attacks. Air cavalry assets are more survivable at night due to the reduced effectiveness of enemy direct fire weapon systems. Planning for night attacks begins as early as possible to allow for daytime preparation and to incorporate sleep plans. The plan is kept simple to facilitate execution. Control measures at night are usually more restrictive than those used during daylight conditions. Route reconnaissance and marking of the direction of attack facilitate rapid execution.

ATTACK POSITION

3-180. The attack position is the last covered and concealed position an attacking force may occupy before crossing the LD. It may also be a PZ, HA, or an AA.

RAID

3-181. A raid is an attack into enemy-held territory for a specific purpose other than to gain or hold terrain. It usually ends with a planned withdrawal when the assigned mission has been completed. A cavalry squadron or troop may be assigned the raid mission or it may provide reconnaissance and security for the raiding force. Air cavalry forces seldom accompany a ground force as it moves to the objective. These units usually link up at the objective. Air cavalry missions during a raid include—

- Reconnoitering air routes for raiding aircraft.
- Screening air assault elements en route to objectives.
- Provides area security while air assault forces board aircraft for the withdrawal.
- Controlling preparatory fires on objectives before air assault forces arrive.
- Screening raid forces while at the objective by identifying enemy reinforcement attempts.
- Providing local security for AH units as they engage targets in the objective area.

EXPLOITATION AND PURSUIT OPERATIONS

3-182. Exploitation and pursuit operations are conducted to destroy the enemy's forces or their ability to resist. Exploitation and pursuit operations are characterized by speed of execution, combined arms operations, and decentralized C². The ACR is well organized and equipped to conduct exploitation and pursuit. DCSs may participate in exploitation and pursuit operations as part of a larger force. As such, the DCS will normally perform reconnaissance or security missions in support of the main exploiting or pursuing force.

EXPLOITATION FORCE

3-183. By maintaining constant pressure on and contact with the fleeing enemy, air cavalry allows the ground exploitation force to advance rapidly. It provides continual reports about escaping enemy forces, enemy reinforcements, and heavily and lightly defended areas. Air cavalry moves ahead of the lead elements in the exploitation to gather information that the ground commander uses to direct his assets. Key intelligence includes information about artillery positions, abandoned vehicles, supply installations, CPs, and signal installations. After identifying these locations, air cavalry suppresses and isolates them while waiting for stronger forces to arrive and destroy them. Air cavalry units should have indirect artillery assets available. The air cavalry commander coordinates with ATKHB leaders in moving their assets into battle. After ground forces penetrate the enemy's defenses, many tasks in an exploitation are similar to those in a movement-to-contact. The air cavalry commander's main concern during an exploitation is that his elements may outrun their support. Timely relocation of FARPs is critical to sustained operations. FARPs may be best located with the exploiting ground forces.

PURSUIT FORCE

3-184. The pursuit force is organized into two elements—direct pressure force and encircling force. The direct pressure force conducts a series of hasty attacks to maintain attack momentum and to inflict maximum casualties. Armor heavy forces are ideally suited for this role. The encircling force moves swiftly to cut off the retreating enemy. It advances parallel to the enemy's line of retreat to reach key bridges, road intersections, and mountain passes ahead of the enemy. Air cavalry may be organized as part of the direct pressure force. In this role, it secures the force from flank attack by reinforcements. When air cavalry precedes the direct pressure force, it provides intelligence information to support hasty attacks. Air cavalry also maintains contact with isolated enemy strongpoints until ground elements can attack and destroy them.

3-185. The air cavalry is usually part of the encircling force. In this role, it maintains contact with the fleeing forces to identify locations that can be used to block the enemy's retreat. If air assault forces are used to establish these blocking positions, air cavalry reconnoiters the air routes, LZs, and strongpoints. It may also provide en route security for the air assault force. When armor forces attempt to encircle the fleeing force, air cavalry conducts hasty route reconnaissance to expedite the movement of ground forces to blocking positions. Throughout the operation, air cavalry employs direct and indirect fires to further disrupt and destroy the enemy. Air cavalry assets provide continual reports about any changes in the enemy's direction of movement, location, or disposition. It also assists in directing AH units into BPs to complete the enemy's destruction.

PREASSAULT FIRES

3-186. PAF is a special purpose raid conducted to set favorable conditions for airborne or air assault operations. Preassault fires normally are initiated with an area reconnaissance of the DZ or LZ and the initial assault objectives. This confirms or denies enemy presence and detects any threat forces that could endanger the friendly assaulting force prior to their assembly. Following the reconnaissance, ACTMs occupy SBF positions to overwatch the DZ and/or LZ and conduct hasty attacks against observed enemy forces. Engagement priority is normally ADA suppression to protect the assault force aircraft, followed by the destruction of threat mortars and/or artillery that could disrupt the assembly of the assault troops.

3-187. Timing of the PAF mission is critical. ACTMs must be given adequate time in the area prior to the assault so that they can detect and engage the enemy. If the ACTMs are employed too early, the element of surprise may be lost. Fuel must either be airdropped with the assault force or air landed, so fuel is normally the major limiting factor in the amount of time the aircraft can devote to PAF. The RAS commander should employ the AH-64 ATKHTs in the PAF role due to their extended range capability and heavier weapons load. If the DCS is assigned this mission, the KWs must be forward deployed within appropriate range of the objective. Fat Hawk UH-60 (Black Hawks with ERFs and fuel pumps) can be used to extend the operational range of the KW.

3-188. Communications during PAF from the ACTM to the force commander must be planned with redundant capabilities. ACTMs should also be able to communicate with any special operation forces, long-range surveillance teams, overwatching the DZ and/or LZ. During airborne operations, ACTMs will provide a critical countermortar role following the assault until counterfire radars (Q36, Q37) can be air landed. Enemy mortars are located through crater analysis and a thorough IPB. IPB identifies probable mortar positions and tasks ACTMs to orient on these areas during a reconnaissance mission.

BATTLE HANDOVER

3-189. A BHO is a coordinated operation between two units that transfers responsibility for fighting an enemy force from one unit to another in the close-in battle. It is designed to maintain continuity of the combined arms fight and protect the combat potential of both forces involved. BHO is usually associated with a passage of lines. BHO may occur during both offensive and defensive operations. A clear SOP allows units to quickly establish the necessary coordination to preclude a loss of momentum in the attack. The control measures used are simple and standardized. In the conduct of air and ground operations, the air and ground troop commanders often pass an enemy force in contact to another. BHO governs this process in terms of close coordination, FS, and mutual understanding of responsibilities. No method of communication is better than face-to-face contact. Whenever the situation permits, face-to-face, air-to-ground, and air-to-air linkups between individuals should be made. There are innumerable benefits to landing next to your relieving counterpart, getting out and showing that person, on a map, the battlefield situation that you gathered.

PASSAGE OF LINES

3-190. A passage of lines is an operation in which one force moves either forward or rearward through another force to gain or break contact with the enemy. The squadron frequently conducts a passage of lines as a part of reconnaissance, screening, and air assault security operations. The passing force is particularly vulnerable during a passage of lines as personnel may be overly concentrated, stationary fires may be temporarily masked, and the passing unit may not be properly dispersed to react to enemy actions. Reconnaissance and coordination are critical to ensure the passage is conducted quickly and smoothly. If a unit must pass laterally through another unit, movement is conducted as a forward passage. A passage of lines is often necessary because the factors of METT-T do not permit one unit the freedom of bypassing another friendly unit. Hence, the units must pass through each other. A passage of lines may be conducted to—

- Envelop an enemy force.
- Pursue a fleeing enemy.
- Continue an attack or counterattack.
- Pass forward or withdraw reconnaissance units.
- Pass forward or withdraw a covering force or MBA forces.

3-191. Air cavalry frequently conducts a passage of lines as a part of reconnaissance, screening, and air assault security operations. It may assist the passage of lines of the GCTs.

3-192. When air cavalry is involved in a passage of lines, timely and specific coordination before the operation is essential. The most desirable method is a face-to-face exchange of information. As a minimum, the exchange of information should include—

- Period of time required for the passage.
- Locations of passage points along the FEBA or FLOT.
- Disposition and scheme of maneuver of friendly units.
- Enemy situation in sector, to include air activity.
- Types and numbers of aircraft to make passage, if applicable.
- Methods of communication, to include frequencies and nets, visual and backup communications, and recognition signals.
- Control of friendly supporting fires, to include restrictive FS coordination measures and AD weapon control status.
- Friendly unit locations.
- ADA weapon and/or control status.
- Alternate passage lanes.
- Contingency plan if stationary and/or passing units are attacked during passage.

3-193. Forward passages of lines are normally executed during offensive operations to continue an attack; to conduct a penetration, an envelopment, or a pursuit; or to pass another unit. In the defense, a forward passage of lines may be used to counterattack one unit through another.

3-194. During an air assault operation, coordination may be accomplished at the air mission briefing. After coordination, the commander begins troop leading procedures, issues orders, and allows time for subordinate planning and preparation. C² elements participating in the passage may also be collocated for more effective coordination. In an air assault, collocation will not be possible. During a passage of lines, air cavalry may conduct a reconnaissance of the passage points, initiate and maintain liaison, and conduct screening operations. During reconnaissance operations for preparation for a forward passage of lines, air cavalry covers routes to, through, and beyond the area of passage. It also includes existing unit locations and proposed positions. Care must be taken not to compromise unit locations and intentions during passage.

3-195. When air cavalry returns from a reconnaissance or security mission, it performs a rearward passage of lines in the same manner as other maneuver units. The squadron must ensure contact is maintained with the enemy during a rearward passage of lines. Contact points should be located along the designated passage PL. This allows the stationary unit to provide overwatching fires. Contact points should be at easily identifiable terrain features such as road junctions or towns.

3-196. Either at the contact point or at the stationary unit's TOC, stationary unit personnel brief passing unit personnel on all pertinent information. The squadron's plan of how the passage will occur is exchanged at this contact if it has not already been delivered or transmitted. The squadron normally passes CSS assets first and CS, TOC, and combat forces last. Squadron elements are responsible for overwatch of the designated PL. This is essential so that elements do not get cut off.

3-197. The squadron commander or S3 prepares a tentative plan for the passage of lines and analyzes METT-T and the higher commander's intent. The squadron commander or S3 places additional emphasis on the factors listed below.

Organization

3-198. When possible, unit integrity is maintained to provide better C².

Order of Movement

3-199. An order of movement is prescribed based on the number of passage points and degree of security required. The enemy situation and the terrain also influence the order of movement and the priorities on who moves when.

Security

3-200. Squadron elements assist in a passage of lines by screening between the enemy and the passing force to provide early warning and limited protection. Noise, light, and radio discipline must be enforced. The air reconnaissance squadron may occupy a screen line or serve as the controlling element for a divisional or brigade passage of lines.

Command and Control

3-201. The techniques of C² depend on the number of passage points. Ideally, multiple passage points are established to facilitate decentralized control. Commanders of units involved in the passage of lines must decide how they can best influence the action and then position themselves accordingly.

BATTLE HANDOVER LINE

3-202. BHL is the location where the stationary force assumes control of the battle. It must enable the stationary force to engage the enemy with direct fire systems. The BHL should be portrayed on the overlay as a PL. The BHL is also the place where the moving force assumes control of the battle in a forward passage of lines.

FEINT

3-203. A feint is a limited attack to divert an enemy's attack or to deceive the enemy as to the friendly force's intentions. Doctrinally, brigade and smaller units conduct feints before or during a main attack to deceive the enemy. To succeed, the feint must appear as a serious attack. Additional feints are conducted to cause the enemy to reveal its defensive posture and disrupt its decision making cycle. These feints reduce the resistance that the attacking force will encounter. The squadron normally conducts reconnaissance and screening operations during a feint. However, the situation may require the squadron to engage targets more aggressively than normal with or without augmentation. The squadron may have to develop the situation more thoroughly in the objective area to compensate for the lack of reinforcements. The squadron screens the flanks and rear of the force conducting the feint, or it moves to join operations in the main attack area. The RAS can assist in feint operations by having the AHT execute false insertions. However, the force commander must assess the risks and determine whether reconnaissance assets will be employed in this role.

DEMONSTRATION

3-204. A demonstration serves the same purpose as a feint, but it differs in that it does not involve contact with the enemy. The objective of a demonstration is to deceive and confuse the enemy as to the real intentions of the attacking force. For a demonstration to succeed, the enemy must observe the demonstrating force's operation and be deceived by it but not actively engage the force. The nature of a demonstration allows for the use of decoys, simulations, and tactically inoperable equipment to portray additional strength. Squadron's will normally employ heavy volumes of indirect fires and an increase in air traffic to perform a demonstration. It may also be used to provide security for a demonstrating force or to conduct reconnaissance to assess the enemy reaction. Air cavalry's principal role in a demonstration may be to be seen and heard conducting operations in a given area. The AHT of a RAS, in conjunction with an ACT, may simulate an air assault operation. A DCS will seldom conduct a demonstration as a whole unit. The force commander should assess the risks for this operation as he would for a feint.

SECTION V—DEFENSIVE OPERATIONS

DEEP OPERATIONS

3-205. Deep operations to destroy the enemy are feasible missions for the AH-64 but are strictly limited when such a mission is assigned to the OH-58D KW. See FM 1-112 for information on AH deep operations. The following discussion of METT-T will show that, though capable of performing limited deep operations, the OH-58D KW has limitations that planners must be aware of when selecting feasible targets.

MISSION

3-206. The commander of a corps, division, or RAS may consider the use of OH-58D KWs to conduct limited deep operations against enemy forces.

ENEMY

3-207. Consideration of the enemy unit's size, strength, location, disposition, activity, equipment, and probable COA is made by planners within the decide, detect, deliver, and assess process. Planners must consider potential and criticality factors when targeting. They must consider the enemy force's and/or unit's current or future contribution to the close battle. Attacking this force and/or unit will impede the enemy's ability to concentrate forces, control operations, or support his operations at critical times.

TERRAIN

3-208. Planners must consider the enemy force's and/or unit's present or future location and timing in that location to determine its vulnerability to AHs during targeting.

NOTE: The conditions that maximize effectiveness and minimize risk for deep operations are terrain that supports engagements from standoff ranges and darkness.

TROOPS

3-209. Collective capabilities and limitations of KW units are discussed below.

Firepower

3-210. Table 3-2 depicts the TOE authorized quantities of weapons systems components for a KW troop of eight aircraft.

Table 3-2. Authorized Weapons System Components

WEAPON	QTY Per Troop
Launcher, guided missile aircraft (Hellfire)	6
Launcher, rocket aircraft 2.75-inch 7-tube M260	9
Launcher, guided missile aircraft XM292 (ATAS)	9
Machine gun .50 cal: XM296	7

Self-protection

3-211. KW aircrews use 2.75-inch rockets or .50 cal machine gun to engage close-in targets or unexpected contacts for protection of themselves or their wingman. The crew of a "heavy missile" KW relies upon its wingman solely for this critical support. As a result, a "mix" of rockets and .50 cal should always be used by KWs when conducting deep operations where such instances of close-in enemy targets or unexpected contact is likely.

Survivability

3-212. Table 3-3 compares and contrasts survivability aspects between the Apache and KW.

Table 3-3. Survivability: KW to Apache

FACTOR	KW TO APACHE
ASE	Less robust package
Signature (radar, IR, visual)	Smaller (MMS great advantage)
Systems	Fewer redundant
Speed	Slower
Ballistic Protection	Less for aircraft systems and crew

Range

3-213. Ninety knots is the planning airspeed for a KW that is loaded (gas and ammunition) which yields a combat radius of approximately 150 km with a 10-minute station time and 20-minute fuel reserve. A Fat Cow (CH-47 with extra fuel and pumps carried internally) or Fat Hawk (UH-60 configured with auxiliary fuel tanks and FARE equipment) in the vicinity of the FLOT could increase the distance of a KW unit's attack. See FM 1-111, Appendix J for details on FARP operations.

TIME

3-214. Unlike the Apache, the KW can not carry an external fuel tank to extend its mission duration, time on station, or combat radius for the attack.

COMBINED KIOWA WARRIOR AND APACHE DEEP OPERATIONS

3-215. A technique of task organizing KWs and Apaches for a deep operation provides commanders with an extremely flexible, robust, and comprehensive attack package. KWs are well suited for target acquisition, designation, security, and final engagement and/or BDA of EAs.

CLOSE OPERATIONS

3-216. Air cavalry conducts close operations in two separate areas—the security area and the MBA.

SECURITY AREA

3-217. As in a movement to contact, air cavalry provides security for the main body by screening the covering force. As part of the covering force, air cavalry may be tasked to screen the entire division front. In this role, air cavalry is employed as an integral part of the cavalry squadron. A zone reconnaissance is conducted during movement to the initial screen. If the division occupies a broad front, air cavalry assets will be limited in their time on station due to the larger area to be covered. Therefore, air cavalry must have long range indirect fire assets available to rapidly respond in order to impede and harass the enemy. During the screening mission, air cavalry continually passes spot reports concerning the enemy's movement, location, and disposition. Roles of air cavalry in the security area include the following:

- Provide security for the air assault movement of light infantry forces.
- Orchestrate CAS, artillery, and AHs in JAAT operations.
- Orient assets on high-speed avenues of approach and areas not sufficiently covered by ground elements.
- Develop intelligence for a hasty attack and secure the attacking forces with a screening operation.
- Conduct aerial route reconnaissance for ATKHB when they are maneuvering to attack follow-on elements.
- Operate within the squadron and/or regiment in an economy of force role to free ground units so they can mass in other areas of the battlefield.
- Screen the flanks of the division and/or corps to maintain contact with friendly forces and prevent the enemy from conducting flank attacks.
- Provide overwatch for moving ground elements. This is essentially a screen mission designed to gain reaction time and maneuver space).

MAIN BATTLE AREA

3-218. The decisive battle is fought in the MBA. Security force elements will have developed the situation to slow the enemy and buy time for the main

body. The BHO is critical and includes a passage of line and a shift of responsibilities from the security force to the main battle commander. This handover must occur quickly and efficiently to reduce vulnerability. The principal duty of air cavalry is to provide security during the handover phase as it helps to ensure an orderly handover. Specific air cavalry missions may include the following:

- Secure the flanks and rear of the main body.
- Orchestrate JAAT operations within the MBA.
- Act as a rapid reaction force to counter enemy penetrations.
- Counter enemy airborne operations into the MBA.
- Maintain lines of communication and supply in the MBA by conducting reconnaissance and security along the routes.
- Conduct air combat operations.

REAR OPERATIONS

3-219. Air cavalry gives commanders a highly mobile and lethal combat force able to respond to enemy incursions in the rear areas. As the commanders most mobile means to gain and maintain contact, air cavalry units might be tasked as part of a tactical combat force able to respond to enemy incursions.

3-220. As the battlefield becomes less linear, rear area operations must be anticipated. Rear battle planning should be included in all tactical plans. Rear combat operations rarely come in places of our choosing. Information can be confusing, even contradictory, as to the location and size of the enemy force. Commanders must be prepared to move rapidly to positions from which they can assess and act.

3-221. Even though enemy and friendly lines may not be clearly discernible, rear operations will occur in and around base clusters, logistics sites, and storage facilities. From a battle command viewpoint, it will be fought much like a close battle. The possibility of fratricide during rear battle places a premium on all control measures. However, the fluid nature of the rear battle does not lend itself to static control measures. Based on the enemy COAs and friendly response, contingency control measures can be developed and distributed as part of the planning process and activated as appropriate, based on the situation. This planning should include air routes, indirect fires reference points, and location of known or planned ground unit locations.

3-222. The variety of possibilities that may be encountered does not allow for any one way to conduct rear operations. The situation will dictate how air cavalry can best be employed.

SECTION VI—RETROGRADE OPERATIONS

PURPOSE

3-223. A retrograde operation is an organized movement to the rear or away from the enemy. It may be forced by the enemy or voluntarily done. The three types of retrograde operations are delay, withdrawal, and retirement. The basic reason a squadron conducts a retrograde operation is to improve a tactical situation or keep a worse one from occurring. Air troops normally assist the squadron in conducting this operation. FM 17-95 contains further details on retrograde operations. A retrograde operation may be conducted to—

- Gain time.
- Preserve forces.
- Shorten lines of communication.
- Reposition forces on the battlefield.
- Avoid combat under undesirable conditions.
- Draw the enemy into an unfavorable position.
- Permit the withdrawal of a force for use elsewhere.

DELAY

3-224. A delay is normally conducted as part of a defensive battle. The intent of a delay is to gain time. The destruction of the enemy is of secondary importance. The integration of air cavalry is crucial to a successful delay operation. The firepower and mobility of air cavalry units allow the squadron to bolster any delay through filling gaps within the squadron, providing depth during the movement of ground troops, and helping the commander see the entire battlefield. However, integrating all combined arms and an extensive obstacle plan enhances effectiveness of the delay. The delaying force must simultaneously—

- Preserve the force by not becoming decisively engaged.
- Preserve freedom to maneuver.
- Maintain operational coherence.
- Cause the enemy to deploy and react to successive attacks.
- Maintain contact with the enemy.

3-225. Air cavalry accomplishes several of the missions identified above during their normal reconnaissance and security missions. Air cavalry compliments the ground elements by controlling long-range fires as the friendly elements disengage and move to alternate or successive positions. They maintain surveillance of high-speed avenues of approach to ensure that the delaying force is not bypassed or encircled. Sometimes, the organic firepower of ACTs is not enough. When this happens, the squadron will ask for additional firepower in the form of ATKHBs.

3-226. In regimental cavalry, the aviation squadron provides a fourth maneuver squadron. During delay operations, the RAS may be assigned its own sector (with augmentation), may operate in conjunction with the ground under control of the RAS commander, or have its air troops placed under

OPCON of the ground squadrons. Additionally, the attack troops provide the regiment with a highly mobile reserve force.

3-227. Assault helicopters are often used to move light infantry forces to alternate and successive positions. Air cavalry supports these operations by conducting an aerial route reconnaissance. They also provide security for the air assault forces and conduct PZ and/or LZ reconnaissance and security missions.

WITHDRAWAL

3-228. Commanders conduct withdrawals to extract subordinate units from combat, adjust defensive positions, or relocate the entire force. A withdrawal occurs when a force in contact with the enemy frees itself for a new mission. The force may withdraw to continue the defense in-depth or to perform a different mission. There are two types of withdrawal—under enemy pressure and not under enemy pressure.

3-229. Under enemy pressure, the unit depends on fire and maneuver to break contact with the enemy force and then withdraw.

3-230. Not under enemy pressure, the unit depends on speed of execution and deception. If the unit is not under attack, the withdrawal is not under pressure.

3-231. Air cavalry performs the same missions during a withdrawal operation as they would during a delay. In addition to performing reconnaissance and security operations, air cavalry provides the force commander with battlefield intelligence in the form of spot reports. They assist the ground forces in passage of lines and BHO and can provide the ground forces with a highly maneuverable antitank capability. Air cavalry can also coordinate FS and CAS. Air cavalry assets may also be included in deception and security operations in support of the withdrawal.

RETIREMENT

3-232. Retirements are rearward movements conducted by units not in contact. Retirement is when a unit not in contact moves away from the enemy. Movement to the rear is conducted in an orderly fashion. Retirement may be the continuation of a withdrawal. Air cavalry assists retiring units by providing reconnaissance and security. Air cavalry should use the same planning considerations for a retirement that they would for a withdrawal. Contingency missions, such as screens or route reconnaissance, can be assigned to air cavalry units if contact with the enemy is made.
